

# Author Index

## Volume 48 (July–December 1989)

### KEY TO ABBREVIATIONS USED FOR ARTICLE CLASSIFICATION

\* = Original Article  
AN = Announcement  
CL = Classics in Thoracic  
Surgery  
CR = Case Report

CP = Correspondence  
CT = Collective Review  
CV = Current Review  
DI = Discussion  
ED = Editorial  
HW = How to Do It

KR = Key References  
PA = Presidential Address  
RE = Report  
RV = Review of Recent  
Books

Abbott CR. *see* Eng, Ravichandran, & others. 1989;48:813–5\*

Abd-Elfattah AS. *see* Mask, Abd-Elfattah, & others. 1989;48:109–12\*

Abe T, Tukamoto M, Yanagiya M, Morikawa M, Watanabe N, & Komatsu S. De Vega's annuloplasty for acquired tricuspid disease: early and late results in 110 patients. 1989;48:670–6\*

Abe T. *see* Tanaka, Abe, & others. 1989;48:857–8,CR

Abs R. *see* Van Schil, Vaneerdeweg, & others. 1989;48:889–90,CP

Acar C. *see* Gandjbakhch, Acar, & Cabrol. 1989;48:871–3,CR

Acinapura AJ, Rose DM, Jacobowitz IJ, Kramer MD, Robertazzi RR, Feldman J, Zisbrow Z, & Cunningham JN. Internal mammary artery bypass grafting: influence on recurrent angina and survival in 2,100 patients. 1989;48:186–91\*

Adams CW. *see* Velanovich & Adams. 1989;48:456,CP

Ahmad A. *see* Floten, Ahmad, & others. 1989;48:757–63\*

Akaogi E, Mitsui K, Sohara Y, Endo S, Ishikawa S, & Hori M. Treatment of postoperative chylothorax with intrapleural fibrin glue. 1989;48:116–8,CR

Akimoto K. *see* Iwahara, Ino, & others. 1989;48:693–6\*

Akins CW. Cardiac valve replacement in the elderly: clinical performance of biological prostheses. 1989;48:185,DI

Akins CW. Long-term survival after postinfarction bypass operation: early versus late operation. 1989;48:762,DI

Alajmo F, Calamai G, Perna AM, Melissano G, Pretelli P, Palmarini MF, Carbonetto F, Noferi D, Boddi V, Palmiello A, & Vaccari M. High-dose aprotinin: hemostatic effects in open heart operations. 1989;48:536–9\*

Alam M. *see* Magilligan, Lewis, & others. 1989;48:324–30\*

Ali MK. *see* Wahi, McMurtrey, & others. 1989;48:33–7\*

Allmendinger P. *see* Chatson, Gallagher, & others. 1989;48:719–20,CR

Almassi GH, Olinger GN. Another method for tunneling defibrillator leads. Reply. 1989;48:610,CP

Amato J. *see* Gabbay, Bennett, & others. 1989;48:428–31,CR

Amato JJ. *see* Gabbay, Guindy, & others. 1989;48:803–12\*

Anderson RH. *see* Suzuki, Ho, & others. 1989;48:792–7\*

Anderson SK. *see* Curtis, Nawarawong, & others. 1989;48:764–8\*

Anderson WJ. *see* Lackey, Reagan, & others. 1989;48:218–21\*

Andrews JF. *see* Gabbay, Guindy, & others. 1989;48:803–12\*

Angelini A. *see* Stellin, Mazzucco, & others. 1989;48:577–8,CR

Angelini GD, Christie MI, Bryan AJ, & Lewis MJ. Surgical preparation impairs release of endothelium-derived relaxing factor from human saphenous vein. 1989;48:417–20\*

Angelini GD, Witsenburg M, Ten Kate FJW, Hiddema PAE, & Quaegebeur JM. Severe stenotic scar contracture of the

Microvel Hemashield right-sided extracardiac conduit. 1989;48:714–6,CR

Angell WW, Oury JH, Duran CG, & Infantes-Alcon C. Twenty-year comparison of the human allograft and porcine xenograft. 1989;48:S89–90\*

Antinori CH, Villanueva DT, Manuele VJ, Kuchler JA, & Santaspirt J. A method of retraction during reoperative coronary operations using the Favaloro retractor. 1989;48:440,HW

Arbit E, Galicich JH, Burt M, & Mallya K. Modified open thoracic rhizotomy for treatment of intractable chest wall pain of malignant etiology. 1989;48:820–3\*

Arcidi JM. *see* Cheung, Arcidi, & others. 1989;48:331–8\*

Aris A. Left ventricular rupture. 1989;48:455,CP

Armitage J. *see* Trento, Griffith, & others. 1989;48:617–23\*

Armitage JM. *see* Zenati, Dowling, & others. 1989;48:882–6,CV

Arom KV, Cohen DE, & Strobl FT. Effect of intraoperative intervention on neurological outcome based on electroencephalographic monitoring during cardiopulmonary bypass. 1989;48:476–83\*

Aronovitz M. *see* Diehl, Kaplan, & others. 1989;48:829–34\*

Asamura H, Kato H, Watanabe H, Tachimori Y, Ebihara S, & Harii K. Combined gastric pull-up and microvascular jejunal transfer procedure after pharyngolaryngoesophagectomy. 1989;48:423–5,CR

Ashraf MM. *see* Berger RL, Karlson, & Ashraf. 1989;48:455,CP

Atkinson JB. *see* Frist, Winterland, & others. 1989;48:863–4,CR

Au J, Walker WS, Inglis D, & Cameron EWJ. Percutaneous cricothyroidostomy (minitracheostomy) for bronchial toilet: results of therapeutic and prophylactic use. 1989;48:850–2\*

Axford-Gatley RA. *see* Rebeyka, Wilson, & others. 1989;48:397–403\*

Backer CL, Ilbawi MN, Ohtake S, DeLeon SY, Muster AJ, Paul MH, Benson DW Jr, & Idriss FS. Transposition of the great arteries: a comparison of results of the Mustard procedure versus the arterial switch. 1989;48:10–4\*

Badellino M. *see* Cavarocchi & Badellino. 1989;48:130–3,HW

Bailey LL. Lessons learned in pediatric heart transplantation. 1989;48:622,DI

Bailey LL. Pediatric heart transplantation. 1989;48:612,ED

Baillet R. *see* Verdant, Page, & Baillet. 1989;48:686–8,CR

Baird RJ. *see* Teasdale, Zulys, & others. 1989;48:712–3,CR

Baisden CE, Sand ME, Keith SC, Jackson JF, Mullen PE, & Brown WH. Ductus diverticulum aneurysm and coronary stenosis: repair using circulatory arrest. 1989;48:432–3,CR

Bardini R. *see* Segalin, Little, & others. 1989;48:267–71\*

Baril C. *see* Teijeira, Baril, & Younge. 1989;48:717–8,CR

Barner HB. *see* Fiore, Naunheim, & others. 1989;48:104–8\*

Barry MJ. *see* Edwards, Schaefer, & others. 1989;48:556-9\*

Barry MJ. *see* Thompson, Cohen, & others. 1989;48:721-2,CR

Barwick R. *see* McNally, Barwick, & others. 1989;48:S83-4\*

Barzilai B. *see* Marshall, Barzilai, & others. 1989;48:339-44\*

Bastien O. *see* Durand, Bastien, & others. 1989;48:888-9,CP

Battistessa SA. *see* McKay, Miyamoto, & others. 1989;48:587-9,CR

Bavaria JE. *see* Markovitz, Savage, & others. 1989;48:838-45\*

Bayer-Berger M. *see* Borgeat, Biollaz, & others. 1989;48:232-4\*

Beall AC Jr. Elimination of the cloth sewing ring-metal interface in an effort to decrease thromboembolism. 1989;48:S57-8\*

Beckman D. *see* Pittman, Fehrenbacher, & others. 1989;48:869-70,CR

Bellamy RF. *see* Edwards, Schaefer, & others. 1989;48:556-9\*

Bennett RD. *see* Gabbay, Bennett, & others. 1989;48:428-31,CR

Benson DW, Jr. *see* Backer, Ilbawi, & others. 1989;48:10-4\*

Berger RL, Karlson KJ, & Ashraf MM. Left ventricular rupture. Reply. 1989;48:455,CP

Bergmann SR, & Sobel BE. Surgical recanalization for treatment of evolving myocardial infarction. 1989;48:319-21,ED

Bernstein AD. *see* Parsonnet & Bernstein. 1989;48:738-40,CV

Berry WR. *see* Heydorn, Ferraris, & Berry. 1989;48:743,CP

Binet J-P. Pioneering in heterografts. 1989;48:S71-2\*

Biollaz J. *see* Borgeat, Biollaz, & others. 1989;48:232-4\*

Blackstone EH. *see* Fernandez, Costa, & others. 1989;48:654-9\*

Blackstone EH. *see* Kirklin, Kirklin, & others. 1989;48:783-91\*

Blaisdell FW. *Cardiothoracic Trauma.* 1989;48:118,RV

Blondeau P. *see* Perier, Deloche, & others. 1989;48:54-9\*

Bluemm R. *see* Thermann, Bluemm, & others. 1989;48:565-7\*

Blum M, Panos A, Lichtenstein SV, & Salerno TA. Modified Cabrol shunt for control of hemorrhage in repair of type A dissection of the aorta. 1989;48:709-11,CR

Boddi V. *see* Alajmo, Calamai, & others. 1989;48:536-9\*

Bogen DK. *see* Markovitz, Savage, & others. 1989;48:838-45\*

Bokros JC. Carbon in prosthetic heart valves. 1989;48:S49-50\*

Boley T. *see* Curtis, Nawarawong, & others. 1989;48:764-8\*

Bolling SF. *see* Deeb, Bolling, & others. 1989;48:665-9\*

Bonato R. *see* Bortolotti, Faggian, & others. 1989;48:456-7,CP

Bonchek LI. Should surgical support within the same institution be required for percutaneous transluminal coronary angioplasty? 1989;48:159-60,ED

Borgeat A, Biollaz J, Bayer-Berger M, Kappenberger L, Chapuis G, & Chiolero R. Prevention of arrhythmias by flecainide after noncardiac thoracic surgery. 1989;48:232-4\*

Bortolotti U, Faggian G, Bonato R, & Dan M. Value of transesophageal echocardiography during open heart operation. 1989;48:456-7,CP

Bortolotti U. *see* Stellin, Mazzucco, & others. 1989;48:577-8,CR

Bost WS Jr. *see* Chitwood, Bost, & others. 1989;48:292-4,CR

Boveris A. *see* Ferreira, Burgos, & others. 1989;48:77-84\*

Bowman GA. *see* Watts, Jones, & others. 1989;48:590-1,CR

Brady P, Dionisopoulos T, Desrosiers C, & Chiu RCJ. Growth potential of latissimus dorsi muscle flaps used in the cardiomyoplasty procedure. 1989;48:636-8\*

Braimbridge MV, Darracott-Cankovic S, Chambers DJ, Kosker S, & Yamada M. Biopsy assessment of myocardial protection for valve replacement over the last 24 years. 1989;48:S67-8\*

Braunwald NS. It will work: the first successful mitral valve replacement. 1989;48:S1-3\*

Braunwald NS. *see* Crawford, Milford, & others. 1989;48:S100-2\*

Bredenberg CE. *see* Rosenberg, Bredenberg, & others. 1989;48:508-13\*

Brenowitz JB. *see* Johnson, Brenowitz, & Kayser. 1989;48:19-25\*

Brill PW. *see* Gold, Pulsinelli, & others. 1989;48:643-5\*

Brouwer RMHJ. Coronary-subclavian steal after coronary artery bypass grafting using the internal mammary artery. 1989;48:887,CP

Brown WH. *see* Baisden, Sand, & others. 1989;48:432-4,CR

Brugos R. *see* Montero, Mula, & others. 1989;48:824-8\*

Brunsting LA. *see* Mask, Abd-Elfattah, & others. 1989;48:109-12\*

Bryan AJ. *see* Angelini, Christie, & others. 1989;48:417-20\*

Bucknam C. *see* Rosenberg, Bredenberg, & others. 1989;48:508-13\*

Budaev VN. *see* Konstantinov, Dzemeshkevich, & others. 1989;48:S79-80\*

Bullaboy CA. Bovine pericardium: another cautionary note. 1989;48:743,CP

Burgos M. *see* Ferreira, Burgos, & others. 1989;48:77-84\*

Burkholder JA. *see* Magovern, Liebler, & others. 1989;48:S33-4\*

Burman SO. Heterologous heart valves: past, present, and future. 1989;48:S75-6\*

Burr LH. *see* Jamieson, Burr, & others. 1989;48:173-85\*

Burt M. *see* Arbit, Galicich, & others. 1989;48:820-3\*

Cabrol C. *see* Gandjbakhch, Acar, & Cabrol. 1989;48:871-3,CR

Calamai G. *see* Alajmo, Calamai, & others. 1989;48:536-9\*

Cameron DE. *see* Greene, Cameron, & others. 1989;48:38-42\*

Cameron EWJ. *see* Au, Walker, & others. 1989;48:850-2\*

Cameron EWJ. *see* Walker, Reid, & others. 1989;48:528-35\*

Campbell CD. *see* Nakata, Campbell, & others. 1989;48:628-31\*

Campbell DN. *see* Vigneswaran, Campbell, & others. 1989;48:560-4\*

Canter C. *see* Weinhaus, Canter, & others. 1989;48:206-12\*

Canter CE, Sekarski DC, Martin TC, Gutierrez FR, & Spray TL. Intraoperative evaluation of atrioventricular septal defect repair by color flow mapping echocardiography. 1989;48:544-50\*

Cantó A. *see* Saumench, Escarrabill, & others. 1989;48:272-4\*

Carbonetto F. *see* Alajmo, Calamai, & others. 1989;48:536-9\*

Carmen P. *see* Kahn & Carmen. 1989;48:S10-1\*

Carpentier A. From valvular xenograft to valvular bioprostheses: 1965-1970. 1989;48:S73-4\*

Carpentier A. *see* Dreyfus, Jebara, & others. 1989;48:725-7,HW

Carpentier A. *see* Perier, Deloche, & others. 1989;48:54-9\*

Case K. *see* Crawford, Milford, & others. 1989;48:S100-2\*

Cavarocchi NC, & Badellino M. Heart/heart-lung transplantation. The domino procedure. 1989;48:130-3,HW

Cebollero Marcucci J. *see* Ramirez Schon, Suarez Nieves, & Cebollero Marcucci. 1989;48:356-9\*

Ceithaml EL, Midgley FM, & Perry LW. Long-term results after surgical repair of incomplete endocardial cushion defects. 1989;48:413-6\*

Chachques JC. *see* Perier, Deloche, & others. 1989;48:54-9\*

Chambers DJ. *see* Braimbridge, Darracott-Cankovic, & others. 1989;48:S67-8\*

Chandramouli B. *see* Phillips, Gay, & others. 1989;48:129,HW

Chang C-H, Lee M-C, Shieh M-J, Chang J-P, & Lin P-J. Transatrial membranotomy for Budd-Chiari syndrome. 1989;48:409-12\*

Chang J-P. *see* Chang, Lee, & others. 1989;48:409-12\*

Chant ADB. *see* Thompson & Chant. 1989;48:887-8,CP

Chapman RD. *see* Floten, Ahmad, & others. 1989;48:757-63\*

Chapuis G. *see* Borgeat, Biollaz, & others. 1989;48:232-4\*

Chatson G, Gallagher R, Quahliero D, Ruffett D, & Allmendinger P. Ventricular pseudoaneurysm associated with cardiopulmonary resuscitation 6 weeks after mitral valve replacement. 1989;48:719-20,CR

Chaukar A. *see* Kaul, Patwardhan, & Chaukar. 1989;48:456,CP

Chauvaud S. *see* Perier, Deloche, & others. 1989;48:54-9\*

Cheng TO. Pharmacological responses of internal mammary artery grafts. 1989;48:747,CP

Cherny EJ. *see* Gabbay, Bennett, & others. 1989;48:428-31,CR

Cheung EH, Arcidi JM, Dorsey LMA, Vinten-Johansen J, Hatcher CR Jr, & Guyton RA. Reperfusion of infarcting myocar-

dium: benefit of surgical reperfusion in a chronic model. 1989;48:331-8\*

Chien K-Y. *see* Huang, Sung, & others. 1989;48:660-4\*

Chiolero R. *see* Borgeat, Biollaz, & others. 1989;48:232-4\*

Chitwood WR Jr. Cardiac neoplasms. 1989;48:451-3, KR

Chitwood WR Jr, Bost WS Jr, Pories AJ, Gowen MA, & Saldahna PL. Laryngotracheoesophageal cleft: endoscopic diagnosis and surgical repair. 1989;48:292-4, CR

Chiu RCJ. *see* Brady, Dionisopoulos, & others. 1989;48:636-8\*

Christakis G, Panos A, Peniston CM, Lichtenstein SV, & Salerno TA. Visceral and limb perfusion during thoracoabdominal aortic aneurysm repair. 1989;48:592-4, HW

Christakis G. *see* Panos, Christakis, & others. 1989;48:816-9\*

Christie MI. *see* Angelini, Christie, & others. 1989;48:417-20\*

Clariana A. *see* Saumench, Escarrabill, & others. 1989;48:272-4\*

Clark RE. It is time for a national cardiothoracic surgical data base. 1989;48:755-756, ED

Clarke DR. Cryopreserved valve conduits for outflow tract reconstruction in pediatric patients. 1989;48:S85-6\*

Clarke DR. *see* Vigneswaran, Campbell, & others. 1989;48:560-4\*

Cleveland RJ. *see* Diehl, Kaplan, & others. 1989;48:829-34\*

Coffin LH. *Coronary Angioplasty.* 1989;48:425, RV

Cohen AI. *see* Shapira, Cohen, & others. 1989;48:371-5\*

Cohen AJ. *see* Edwards, Schaefer, & others. 1989;48:556-9\*

Cohen AJ. *see* Thompson, Cohen, & others. 1989;48:721-2, CR

Cohen DE. *see* Arom, Cohen, & Strobl. 1989;48:476-83\*

Cohen DJ. Endoscopic relief of malignant airway obstruction. 1989;48:474, DI

Cohn HE, Hubbard A, & Patton G. Management of esophageal injuries. 1989;48:309-14, CV

Cohn LH. The porcine bioprosthetic heart valve: experience at 15 years. 1989;48:330, DI

Cohn LH, DiSesa VJ, & Collins JJ Jr. The Hancock modified-orifice porcine bioprosthetic valve: 1976-1988. 1989;48: S81-2\*

Cohn LH, Peigh PS, Sell J, & DiSesa VJ. Right thoracotomy, femorofemoral bypass, and deep hypothermia for re-replacement of the mitral valve. 1989;48:69-71\*

Cohn LH. *see* DiSesa, Collins, & Cohn. 1989;48:280-3\*

Coleman GM. *see* Gradinac, Coleman, & others. 1989;48:484-9\*

Collins JJ Jr. *see* Cohn, DiSesa, & Collins. 1989;48:S81-2\*

Collins JJ. *see* DiSesa, Collins, & Cohn. 1989;48:280-3\*

Colquhoun A. *see* Nakatsuka, Colquhoun, & Gehr. 1989;48: 263-6\*

Connolly RJ. *see* Diehl, Kaplan, & others. 1989;48:829-34\*

Conti C. *see* Rosenberg, Bredenberg, & others. 1989;48:508-13\*

Conti VR. *see* Zwischenberger, Shalaby, & Conti. 1989;48:365-70\*

Cook JW. *see* Hess, Howe, & others. 1989;48:6-9\*

Cooley DA. Evolution of surgical treatment of thoracic aortic aneurysms. 1989;48:137-8, CL

Cooley DA. Technical problems in mitral valve repair and replacement. 1989;48:S91-2\*

Cooper JD. *see* Egan & Cooper. 1989;48:741-2, KR

Cooper JD. *see* Todd, Goldberg, & others. 1989;48:146, CP

Copeland JG. *see* Vasu, Icenogle, & others. 1989;48: 315, CP

Costa F. *see* Fernandez, Costa, & others. 1989;48:654-9\*

Coster DD, Gorton ME, Grooters RK, Thieman KC, Schneider RF, & Soltanzadeh H. Surgical closure of the patent ductus arteriosus in the neonatal intensive care unit. 1989;48: 386-9\*

Couetil JP. *see* Dreyfus, Jebara, & others. 1989;48:725-7, HW

Crawford FA Jr. *see* Reed, Parker, & Crawford. 1989;48:165-7\*

Crawford FA Jr. *see* Terranova & Crawford. 1989;48:122-3, CR

Crawford JM, Milford E, Case K, & Braunwald NS. Vital fluorescent staining of human endothelial cells, fibroblasts, and monocytes: assessment of surface morphology. 1989; 48:S100-2\*

Crosby E. *see* Robblee, Crosby, & Keon. 1989;48:575-6, CR

Cross FS, & Jones RD. The development of the Cross-Jones caged-lens prosthesis. 1989;48:S45-6\*

Cross FS. *see* Jones, Dreher, & Cross. 1989;48:S4-5\*

Culpepper WS. *see* Horowitz, Culpepper, & others. 1989;48:444-50, CT

Cunliffe M. *see* McKay, Miyamoto, & others. 1989;48:587-9, CR

Cunningham JN. *see* Acinapura, Rose, & others. 1989;48:186-91\*

Curtis JJ, Nawarawong W, Walls JT, Schmaltz RA, Boley T, Madsen R, & Anderson SK. Elevated hemidiaphragm after cardiac operations: incidence, prognosis, and relationship to the use of topical ice slush. 1989;48:764-8\*

Daggett RL. *see* Gott, Daggett, & Young. 1989;48:S28-30\*

Dalous P. *see* Roux, Fournial, & others. 1989;48:595-6, HW

Daly WL. *see* Schwieger, Gallagher, & others. 1989;48:51-3\*

Dan M. *see* Bortolotti, Faggian, & others. 1989;48:456-7, CP

Daniels O. *see* van Son, Daniels, & others. 1989;48:496-502\*

Danielson GK. *see* Kontos, Schaff, & others. 1989;48:60-5\*

Danielson GK. *see* Tuna & Danielson. 1989;48:143-4, KR

Dark JH. *see* Kirk, Hilton, & Dark. 1989;48:145-6, CP

Darracott-Cankovic S. *see* Braimbridge, Darracott-Cankovic, & others. 1989;48:S67-8\*

Daugherty HK. *see* Hess, Howe, & others. 1989;48:6-9\*

Davey TB. *see* Siegel, Davey, & others. 1989;48:S8-9\*

Davies GA. *see* Fisher & Davies. 1989;48:147, CP

Davila JC. Where is the ideal heart valve substitute? What has frustrated its realization? 1989;48:S20-3\*

Deanfield JE. *see* Suzuki, Ho, & others. 1989;48:792-7\*

Decaro LF. *see* Wahi, McMurtrey, & others. 1989;48:33-7\*

Deeb GM, Bolling SF, Guynn TP, & Nicklas JM. Amrinone versus conventional therapy in pulmonary hypertensive patients awaiting cardiac transplantation. 1989;48:665-9\*

Dein JR, Oyer PE, Stinson EB, Starnes VA, & Shumway NE. Cardiac retransplantation in the cyclosporine era. 1989; 48:350-5\*

DeLeon SY. *see* Backer, Ilbawi, & others. 1989;48:10-4\*

Deloche A. *see* Perier, Deloche, & others. 1989;48:54-9\*

Desrosiers C. *see* Brady, Dionisopoulos, & others. 1989;48:636-8\*

de Virgilio C, Dubrow TJ, Robertson JM, Siegel S, Ginzton L, Nussmeier M, & Nelson RJ. Detection of multiple cardiac papillary fibroelastomas using transesophageal echocardiography. 1989;48:119-21, CR

DeWall RA, & Ellis RL. Implantation techniques: a primary consideration in valve surgery. 1989;48:S59-60\*

Diehl JT, Kaplan E, Dresdale AR, Kreis A, Konstam MA, Ross IM, Connolly RJ, Pandian NG, Aronovitz M, Payne DD, & Cleveland RJ. Effects of atrial cardioplegia on the ischemic right ventricle after acute coronary artery occlusion and reperfusion. 1989;48:829-34\*

DiMarco JP. *see* Kron, Lerman, & others. 1989;48:85-9\*

DiNatale JM. *see* Greene, Cameron, & others. 1989;48:38-42\*

Dionisopoulos T. *see* Brady, Dionisopoulos, & others. 1989;48: 636-8\*

DiSesa VJ, Collins JJ, & Cohn LH. Hematological complications with the St. Jude valve and reduced-dose Coumadin. 1989;48:280-3\*

DiSesa VJ. *see* Cohn, DiSesa, & Collins. 1989;48:S81-2\*

DiSesa VJ. *see* Cohn, Peigh, & others. 1989;48:69-71\*

Dohmann R. *see* Thermann, Bluemm, & others. 1989;48:565-7\*

Donnelly RJ. *see* Muehrcke & Donnelly. 1989;48:257-62\*

Donnelly RJ. *see* Page, Jeffrey, & Donnelly. 1989;48:66-8\*

Dorsey LMA. *see* Cheung, Arcidi, & others. 1989;48:331-8\*

Dowling RD. *see* Zenati, Dowling, & others. 1989;48:882-6, CV

Downey RS. *see* Mansour & Downey. 1989;48:201-5\*

Dreher DM. *see* Jones, Dreher, & Cross. 1989;48:S4-5\*

Dresdale AR. *see* Diehl, Kaplan, & others. 1989;48:829-34\*

Dreyfus G, Jebara VA, Couetil JP, & Carpentier A. Modified Danielson technique for recurrent aortic valve endocarditis. 1989;48:725-7,HW

Drinkwater DC. *see* Mulder, Kattus, & Drinkwater. 1989;48:289-91,CR

Dubrow TJ. *see* de Virgilio, Dubrow, & others. 1989;48:119-21,CR

Dummer JS. *see* Zenati, Dowling, & others. 1989;48:882-6,CV

Duncan JM, Frazier OH, Radovancevic B, & Velebit V. Implantation techniques for the Hemopump. 1989;48:733-5,HW

Duncan JM. *see* Lammermeier, Nakatani, & others. 1989;48:168-72\*

Duran CG. *see* Angell, Oury, & others. 1989;48:S89-90\*

Duran-Munoz D. *see* Rubi-Alvarez, Duran-Munoz, & others. 1989;48:147,CP

Duranceau A. Evolving techniques in the management of benign esophageal stricture. 1989;48:322-3,ED

Durand PG, Bastien O, George M, Lehot JJ, Gurbala A, & Estanove S. Impairment in right ventricular performance after left ventricular aneurysm operation. 1989;48:888-9,CP

Dzemeshkevich SL. *see* Konstantinov, Dzemeshkevich, & others. 1989;48:S79-80\*

Dzemeshkevich SL. *see* Konstantinov, Ivanov, & others. 1989;48:S77-8\*

Eastburn TE. *see* Frist, Winterland, & others. 1989;48:863-4,CR

Ebihara S. *see* Asamura, Kato, & others. 1989;48:423-5,CR

Edmunds LH Jr. *see* Markowitz, Savage, & others. 1989;48:838-45\*

Edwards FH, Schaefer PS, Cohen AJ, Bellamy RF, Thompson L, Graeber GM, & Barry MJ. Use of artificial intelligence for the preoperative diagnosis of pulmonary lesions. 1989;48:566-9\*

Edwards FH. *see* Thompson, Cohen, & others. 1989;48:721-2,CR

Effert S. *see* Minale, Nikol, & others. 1989;48:235-41\*

Egan TM, & Cooper JD. Lung transplantation. 1989;48:741-2,CR

Eisert DR. *see* Frist, Winterland, & others. 1989;48:863-4,CR

Elami A. *see* Shafir, Weiss, & others. 1989;48:584-6,CR

El-Dalati H. *see* Panos, Christakis, & others. 1989;48:816-9\*

Eliasson AH. *see* Seyfer, Walsh, & others. 1989;48:284-6,CR

Elkins RC. *see* Randolph, Toal, & others. 1989;48:345-9\*

Ellis R. *see* DeWall & Ellis. 1989;48:S59-60\*

Ellis R. *see* Mikhail, Ellis, & Johnson. 1989;48:S61-4\*

Endo S. *see* Akaogi, Mitsui, & others. 1989;48:116-8,CR

Eng J, Pradhan GN, Sabanathan S, & Mearns AJ. Malignant melanoma metastatic to the esophagus. 1989;48:287-8,CR

Eng J, Ravichandran PS, Abbott CR, Kay PH, Murday AJ, & Shreiti I. Reoperation after pericardial closure with bovine pericardium. 1989;48:813-5\*

Eng J, & Sabanathan S. Tissue adhesive in bronchial closure. 1989;48:683-5\*

Esato K. *see* Gohra, Mori, & Esato. 1989;48:96-103\*

Escarrabill J. *see* Saumench, Escarrabill, & others. 1989;48:272-4\*

Estanove S. *see* Durand, Bastien, & others. 1989;48:888-9,CP

Fabiani JN. *see* Perier, Deloche, & others. 1989;48:54-9\*

Fabri BM. *see* Page, Russell, & others. 1989;48:514-7\*

Faggian G. *see* Bortolotti, Faggian, & others. 1989;48:456-7,CP

Faggian G. *see* Stellin, Mazzucco, & others. 1989;48:577-8,CR

Fall SM. *see* Pezzella, Fall, & others. 1989;48:859-62,CR

Fehrenbacher J. *see* Pittman, Fehrenbacher, & others. 1989;48:869-70,CR

Feldman J. *see* Acinapura, Rose, & others. 1989;48:186-91\*

Ferguson DW. *see* Lemmer, Winniford, & Ferguson. 1989;48:295-7,CR

Ferguson MK. *see* Segalin, Little, & others. 1989;48:267-71\*

Fernandez G, Costa F, Fontan F, Naftel DC, Blackstone EH, & Kirklin JW. Prevalence of reoperation for pathway obstruction after Fontan operation. 1989;48:654-9\*

Ferraris VA. *see* Heydorn, Ferraris, & Berry. 1989;48:743,CP

Ferreira R, Burgos M, Llesuy S, Molteni L, Milei J, Flecha BG, & Boveris A. Reduction of reperfusion injury with mannitol cardioplegia. 1989;48:77-84\*

Fessler CL. *see* Floten, Ahmad, & others. 1989;48:757-63\*

Figuera D. *see* Montero, Mula, & others. 1989;48:824-8\*

Finck SJ, Mashburn JP, Kottke BA, & Orszulak TA. Evaluation of arterialized vein graft permeability with Evans blue dye and iodine 125-labeled albumin. 1989;48:646-50\*

Finelli FC, Piasio M, Mahfood S, Keshishian JM, & Golocovsky M. Esophageal rupture complicated by a gastrocardiac fistula: review of the literature and report of a successfully treated case. 1989;48:582-3,CR

Finkle CD. *see* Weisel, Mickle, & others. 1989;48:503-7\*

Finlayson DC. *see* Kopel, Riemersma, & others. 1989;48:228-31\*

Finlayson DC. *see* Schwieger, Gallagher, & others. 1989;48:51-3\*

Fiore AC. Long-term survival after postinfarction bypass operation: early versus late operation. 1989;48:762,DI

Fiore AC, Naunheim KS, Barner HB, Pennington DG, McBride LR, Kaiser GC, & Willman VL. Valve replacement in the octogenarian. 1989;48:104-8\*

Fisher J, & Davies GA. Buckling in bioprosthetic valves. 1989;48:147,CP

Fisher LD, Kaiser GC, Davis KB, & Mock MB. Crossovers in coronary artery bypass grafting trials: desirable, undesirable, or both? 1989;48:465-6,ED

Flanagan TL. *see* Kron, Lerman, & others. 1989;48:85-9\*

Flecha BG. *see* Ferreira, Burgos, & others. 1989;48:77-84\*

Fleming WH, Sarafian LB, Moulton AL, Robinson LA, & Kugler JD. Valve replacement in the right side of the heart in children: long-term follow-up. 1989;48:404-8\*

Fletcher RD. *see* Shapira, Cohen, & others. 1989;48:371-5\*

Floten HS, Ahmad A, Swanson JS, Wood JA, Chapman RD, Fessler CL, & Starr A. Long-term survival after postinfarction bypass operation: early versus late operation. 1989;48:757-63\*

Floten HS. *see* McFalls, Palac, & others. 1989;48:704-5,CR

Fontan F. *see* Fernandez, Costa, & others. 1989;48:654-9\*

Forfang K. *see* Mangschau, Geiran, & others. 1989;48:889,CP

Fournial G. *see* Roux, Fournial, & others. 1989;48:595-6,HW

Fox MA. *see* Page, Russell, & others. 1989;48:514-7\*

Frater RWM. The flexible monocusp valve: the second and third successful mitral valve replacements. 1989;48:S96-7\*

Frater RWM. Human immunodeficiency virus. Reply. 1989;48:746,CP

Frater RWM. The porcine bioprosthetic heart valve: experience at 15 years. 1989;48:330,DI

Frazier OH. *see* Duncan, Frazier, & others. 1989;48:733-5,HW

Frazier OH. *see* Gradinac, Coleman, & others. 1989;48:484-9\*

Frazier OH. *see* Lammermeier, Nakatani, & others. 1989;48:168-72\*

Fricker FJ. *see* Trento, Griffith, & others. 1989;48:617-23\*

Frist WH, Winterland AW, Gerhardt EB, Merrill WH, Atkinson JB, Eastburn TE, Stewart JR, & Eisert DR. Total lymphoid irradiation in heart transplantation: adjunctive treatment for recurrent rejection. 1989;48:863-4,CR

Fujiwara T, Nogami A, Masaki H, Yamane H, Matsuoka S, Yoshida H, Fukuda H, Katsumura T, & Kajiya F. Coronary flow velocity waveforms in aortic stenosis and the effects of valve replacement. 1989;48:518-22\*

Fukuda H. *see* Fujiwara, Nogami, & others. 1989;48:518-22\*

Fukumoto H. *see* Suma, Sato, & others. 1989;48:434-6,CR

Funakoshi N. *see* Nagaoka, Innami, & others. 1989;48:798-802\*

Gabbay S, Bennett RD, Amato J, & Cherny EJ. Controversies in management of sternal tumors. 1989;48:428-31,CR

Gabbay S, Guindy AM, Andrews JF, Amato JJ, Seaver P, & Khan MY. New outlook on pericardial substitution after open heart operations. 1989;48:803-12\*

Galichich JH. *see* Arbit, Galichich, & others. 1989;48:820-3\*

Gallagher CJ. *see* Schwieger, Gallagher, & others. 1989;48:51-3\*

Gallagher R. *see* Chatson, Gallagher, & others. 1989;48:719-20,CR

Gallucci V. *see* Stellin, Mazzucco, & others. 1989;48:577-8,CR

Gandjbakhch I, Acar C, & Cabrol C. Left thoracotomy approach for coronary artery bypass grafting in patients with pericardial adhesions. 1989;48:871-3,CR

Ganzel BL. *see* Gray, Ganzel, & others. 1989;48:222-7\*

Garcia-Bengochea JB. *see* Rubio-Alvarez, Duran-Munoz, & others. 1989;48:147,CP

Gardner TJ. *see* Greene, Cameron, & others. 1989;48:38-42\*

Garrett HE Jr, & Matthews J. Reoperative median sternotomy. 1989;48:305,HW

Gately H. *see* McFalls, Palac, & others. 1989;48:704-5,CR

Gay J. *see* Phillips, Gay, & others. 1989;48:129,HW

Gay WA Jr. Potassium-induced cardioplegia: evolution and present status. 1989;48:441-3,CL

Gehr L. *see* Nakatsuka, Colquhoun, & Gehr. 1989;48:263-6\*

Geiran O. *see* Mangschau, Geiran, & others. 1989;48:889,CP

George M. *see* Durand, Bastien, & others. 1989;48:888-9,CP

Gerein AN. *see* Jamieson, Burr, & others. 1989;48:173-85\*

Gerhardt EB. *see* Frist, Winterland, & others. 1989;48:863-4,CR

Gillbe C. *see* Tsang, Murday, & others. 1989;48:632-5\*

Ginsberg PJ. Endoscopic relief of malignant airway obstruction. 1989;48:474,DI

Ginzton L. *see* de Virgilio, Dubrow, & others. 1989;48:119-21,CR

Glock Y. *see* Roux, Fournial, & others. 1989;48:595-6,HW

Glynn MFX. *see* Teasdale, Zulys, & others. 1989;48:712-3,CR

Gohra H, Mori F, & Esato K. The effect of fluorocarbon emulsion on 24-hour canine heart preservation by coronary perfusion. 1989;48:90-103\*

Gold JP, Pulsinelli W, Winchester P, Brill PW, Jacewicz M, & Isom OW. Safety of metallic surgical clips in patients undergoing high-field-strength magnetic resonance imaging. 1989;48:643-5\*

Goldberg M. *see* Todd, Goldberg, & others. 1989;48:146,CP

Goldschmidt M. *see* Niebauer, Oz, & others. 1989;48:523-7\*

Goldstraw P. *see* Tsang & Goldstraw. 1989;48:568-71\*

Goldstraw P. *see* Tsang, Murday, & others. 1989;48:632-5\*

Golocovsky M. *see* Finelli, Piasio, & others. 1989;48:582-3,CR

Goodenough SH. *see* Siegel, Davey, & others. 1989;48:S8-9\*

Goor DA. *see* Milo, Mohr, & Goor. 1989;48:572-4\*

Gorton ME. *see* Coster, Gorton, & others. 1989;48:386-9\*

Gott VL, Daggett RL, & Young WP. Development of a carbon-coated, central-hinging, bileaflet valve. 1989;48:S28-30\*

Gowen MA. *see* Chitwood, Bost, & others. 1989;48:292-4,CR

Gradinac S, Coleman GM, Taegtmeier H, Sweeney MS, & Frazier OH. Improved cardiac function with glucose-insulin-potassium after aortocoronary bypass grafting. 1989;48:484-9\*

Graeber GM. *see* Edwards, Schaefer, & others. 1989;48:556-9\*

Graeber GM. *see* Seyfer, Walsh, & others. 1989;48:284-6,CR

Graham AM. *Aortic Surgery*. 1989;48:730,RV

Graves M. *see* Mulder, Graves, & Herrmann. 1989;48:551-5\*

Gray LA Jr, Ganzel BL, Mavroudis C, & Slater AD. The Pierce-Donachy ventricular assist device as a bridge to cardiac transplantation. 1989;48:222-7\*

Greeley WJ. *see* Reves & Greeley. 1989;48:752-4,ED

Greene PS, Cameron DE, Griffiths EM, DiNatale JM, & Gardner TJ. Does hypothermic fibrillatory arrest improve myocardial protection during emergency revascularization? 1989;48:38-42\*

Griffith BP. *see* Trento, Griffith, & others. 1989;48:617-23\*

Griffith BP. *see* Zenati, Dowling, & others. 1989;48:882-6,CV

Griffith LD. Autotransfusion of shed mediastinal blood. Reply. 1989;48:888,CP

Griffiths EM. *see* Greene, Cameron, & others. 1989;48:38-42\*

Grillo HC. *see* Mathisen & Grillo. 1989;48:469-75\*

Gromova GV. *see* Konstantinov, Dzemeshkovich, & others. 1989;48:S79-80\*

Grooters RK. *see* Coster, Gorton, & others. 1989;48:386-9\*

Grooters RK. *see* Nishida, Grooters, & others. 1989;48:865-6,CR

Groshen S. *see* Keller, Groshen, & Kaiser. 1989;48:746,CP

Grunkemeier GL, & Starr A. Pitfalls in statistical analysis of heart valve prostheses. 1989;48:S14-5\*

Grunkemeier GL. *see* Starr & Grunkemeier GL. 1989;48:317-8,ED

Guindy AM. *see* Gabbay, Guindy, & others. 1989;48:803-12\*

Gutierrez FR. *see* Canter, Sekarski, & others. 1989;48:544-50\*

Gurbala A. *see* Durand, Bastien, & others. 1989;48:888-9,CP

Gustafson RA, Murray GF, Warden HE, Hill RC, & Rozar GE. Stage I palliation of hypoplastic left heart syndrome: the importance of neoaorta construction. 1989;48:43-50\*

Gwynn TP. *see* Deeb, Bolling, & others. 1989;48:665-9\*

Guyton RA. Long-term survival after postinfarction bypass operation: early versus late operation. 1989;48:762,DI

Guyton RA. *see* Cheung, Arcidi, & others. 1989;48:331-8\*

Haines DE. *see* Kron, Lerman, & others. 1989;48:85-9\*

Hall KV. The Medtronic Hall heart valve: background, latest results, and future work. 1989;48:S47-8\*

Hall RI. *see* Kopel, Riemersma, & others. 1989;48:228-31\*

Halttunen PEA. *see* Taskinen, Salo, & others. 1989;48:846-9\*

Hardesty RL. *see* Trento, Griffith, & others. 1989;48:617-23\*

Hardesty RL. *see* Zenati, Dowling, & others. 1989;48:882-6,CV

Hargrove WC III. *see* Markovitz, Savage, & others. 1989;48:838-45\*

Harii K. *see* Asamura, Kato, & others. 1989;48:423-5,CR

Harken DE. Heart valves: ten commandments and still counting. 1989;48:S18-9\*

Hatcher CR Jr. *see* Cheung, Arcidi, & others. 1989;48:331-8\*

Hatcher CR Jr. *see* Symbas, Vlasis-Hale, & others. 1989;48:192-4\*

Hebeler RF. Simplified technique for open placement and removal of intraaortic balloon. 1989;48:134-6,HW

Heitmiller RF. The serratus sling: a simplified serratus-sparing technique. 1989;48:867-8,CR

Herman O. *see* Shafir, Weiss, & others. 1989;48:584-6,CR

Herrmann C. *see* Mulder, Graves, & Herrmann. 1989;48:551-5\*

Hess PJ, Howe HR Jr, Robicsek F, Daugherty HK, Cook JW, Selle JG, & Stiegel RM. Traumatic tears of the thoracic aorta: improved results using the Bio-Medicus pump. 1989;48:6-9\*

Heydorn WH, Ferraris VA, & Berry WR. Pericardial substitutes. Reply. 1989;48:743,CP

Hiddema PAE. *see* Angelini, Witsenburg, & others. 1989;48:714-6,CR

Higenbottam TW. *see* Smyth, Scott, & others. 1989;48:744,CP

Hikosaka H. *see* Tanaka, Abe, & others. 1989;48:857-8,CR

Hilberman M. *Anesthesia and the Heart Patient*. 1989;48:828,RV

Hill RC. *see* Gustafson, Murray, & others. 1989;48:43-50\*

Hilton CJ. *see* Kirk, Hilton, & Dark. 1989;48:145-6,CP

Hirose H. *see* Kawamoto, Nakano, & others. 1989;48:723-4,CR

Hirose H. *see* Shirakura, Kawashima, & others. 1989;48:124-5,CR

Hirota N. *see* Shirakusa, Ueda, & others. 1989;48:779-82\*

Ho SY. *see* Suzuki, Ho, & others. 1989;48:792-7\*

Hoots AV, & Watson DC Jr. Construction of an aortic homograft conduit for right ventricle to pulmonary artery continuity. 1989;48:731-2,HW

Hori M. *see* Akaogi, Mitsui, & others. 1989;48:116-8,CR

Horowitz MD, Culpepper WS III, Williams LC III, Sundgaard-Riise K, & Ochsner JL. Pulmonary artery banding: analysis of a 25-year experience. 1989;48:444-50,CT

Hosoda Y. *see* Iwahara, Ino, & others. 1989;48:693-6\*

Hosokawa S. *see* Tanaka, Abe, & others. 1989;48:857-8,CR

Howe HR Jr. *see* Hess, Howe, & others. 1989;48:6-9\*

Hsu H-K. *see* Huang, Sung, & others. 1989;48:660-4\*

Hsu W-H. *see* Huang, Sung, & others. 1989;48:660-4\*

Huang B-S. *see* Huang, Sung, & others. 1989;48:660-4\*

Huang M-H, Sung C-Y, Hsu H-K, Huang B-S, Hsu W-H, & Chien K-Y. Reconstruction of the esophagus with the left colon. 1989;48:660-4\*

Hubbard A. *see* Cohn, Hubbard, & Patton. 1989;48:309-14,CV

Icenogle TB. *see* Vasu, Icenogle, & others. 1989;48: 315,CP

Idriss FS. *see* Backer, Ilbawi, & others. 1989;48:10-4\*

Ilbawi MN. *see* Backer, Ilbawi, & others. 1989;48:10-4\*

Infantes-Alcon C. *see* Angell, Oury, & others. 1989;48:S89-90\*

Inglis D. *see* Au, Walker, & others. 1989;48:850-2\*

Innami R. *see* Nagaoka, Innami, & others. 1989;48:798-802\*

Ino T. *see* Iwahara, Ino, & others. 1989;48:693-6\*

Iozzo RV. *see* Markovitz, Savage, & others. 1989;48:838-45\*

Ishida T, Oka T, Nishino T, Tateishi M, Mitsudomi T, & Sugimachi K. Inflammatory pseudotumor of the lung in adults: radiographic and clinicopathological analysis. 1989;48: 90-5\*

Ishida T. *see* Mitsudomi, Tateishi, & others. 1989;48:426-7,CR

Ishida T. *see* Mitsudomi, Tateishi, & others. 1989;48:639-42\*

Ishikawa S. *see* Akaogi, Mitsui, & others. 1989;48:116-8,CR

Isom OW. *see* Gold, Pulsinelli, & others. 1989;48:643-5\*

Ivanov J. *see* Weisel, Mickle, & others. 1989;48:503-7\*

Ivanov VA. *see* Konstantinov, Ivanov, & others. 1989;48:S77-8\*

Iwahara M, Ino T, Nishimoto K, Park I, Akimoto K, Shimazaki S, Yabuta K, Tanaka A, & Hosoda Y. Clinical features of aortic arch anomaly with malalignment ventricular septal defect. 1989;48:693-6\*

Iyer KS, Varma M, & Mee RBB. Use of azygos vein as interposition graft for surgical unifocalization of pulmonary blood supply. 1989;48:776-8\*

Jacewicz M. *see* Gold, Pulsinelli, & others. 1989;48:643-5\*

Jackson JF. *see* Baisden, Sand, & others. 1989;48:432-4,CR

Jacobowitz IJ. *see* Acinapura, Rose, & others. 1989;48:186-91\*

Jamieson WRE, Burr LH, Munro AI, Miyagishima R, & Gerein AN. Cardiac valve replacement in the elderly: clinical performance of biological prostheses. 1989;48:173-85\*

Jatene AD. *see* Pomerantzeff, Zerbini, & others. 1989;48:S41-4\*

Jebara VA. *see* Dreyfus, Jebara, & others. 1989;48:725-7,HW

Jeffrey RR. *see* Page, Jeffrey, & Donnelly. 1989;48:66-8\*

Jessen M. *see* Mask, Abd-Elfattah, & others. 1989;48:109-12\*

Johnson RG, Thurer RL, Lorell BH, & Weintraub RM. Ultrasonic debridement of calcified pericardium in constrictive pericarditis. 1989;48:855-6,CR

Johnson S. *see* Mikhail, Ellis, & Johnson. 1989;48:S61-4\*

Johnson WD, Brenowitz JB, & Kayser KL. Factors influencing long-term (10-year to 15-year) survival after a successful coronary artery bypass operation. 1989;48:19-25\*

Johnsson P, Messeter K, Ryding E, Kugelberg J, & Stahl E. Cerebral vasoreactivity to carbon dioxide during cardiopulmonary perfusion at normothermia and hypothermia. 1989;48:769-75\*

Jones EL. Freehand homograft aortic valve replacement—the learning curve: a technical analysis of the first 31 patients. 1989;48:26-32\*

Jones EL. *see* Kopel, Riemersma, & others. 1989;48:228-31\*

Jones GP. *see* Watts, Jones, & others. 1989;48:590-1,CR

Jones RD. *see* Cross & Jones. 1989;48:S45-6\*

Jones, RD, Dreher DM, & Cross FS. The dog as a model for evaluating prosthetic heart valves. 1989;48:S4-5\*

Kahn P, & Carmen R. Reduction of ball variance in silicone rubber occluders. 1989;48:S10-1\*

Kaiser GA. *see* Palantianos, Thurer, & others. 1989;48:381-5\*

Kaiser GC. *see* Fiore, Naunheim, & others. 1989;48:104-8\*

Kaiser LR. *see* Keller, Groshen, & Kaiser. 1989;48:746,CP

Kajiyama F. *see* Fujiwara, Nogami, & others. 1989;48:518-22\*

Kalke BR. *see* Lillehei, Nakib, & others. 1989;48:S35-7\*

Kaplan E. *see* Diehl, Kaplan, & others. 1989;48:829-34\*

Kappenberger L. *see* Borgeat, Biollaz, & others. 1989;48:232-4\*

Karlson KJ. *see* Berger, Karlson, & Ashraf. 1989;48:455,CP

Karmilowicz NP. *see* Serra, McNicholas, & others. 1989;48:689- 92\*

Kaster RL. *see* Lillehei, Nakib, & others. 1989;48:S35-7\*

Kato H. *see* Asamura, Kato, & others. 1989;48:423-5,CR

Katsumura T. *see* Fujiwara, Nogami, & others. 1989;48:518-22\*

Kattus A. *see* Mulder, Kattus, & Drinkwater. 1989;48:289-91,CR

Katz J. Cryoanalgesia for postthoracotomy pain. 1989;48:5

Kaufman B. *see* Siegel, Davey, & others. 1989;48:S8-9\*

Kaul A, Patwardhan A, & Chauhan A. Use of colostomy bags for chest tube drainage. 1989;48:456,CP

Kawamoto T, Nakano S, Matsuda H, Hirose H, & Kawashima Y. *Candida* endocarditis with saddle embolism: a successful surgical intervention. 1989;48:723-4,CR

Kawashima Y. *see* Kawamoto, Nakano, & others. 1989;48:723- 4,CR

Kawashima Y. *see* Matsuda, Sawa, & others. 1989;48:242-6\*

Kawashima Y. *see* Shirakura, Kawashima, & others. 1989;48:124- 5,CR

Kay EB. Early years in artificial valve development. 1989;48: S24-5\*

Kay GL, Morita S, Mendez M, Zubiate P, & Kay JH. Tricuspid regurgitation associated with mitral valve disease: repair and replacement. 1989;48:S93-5\*

Kay JH. *see* Kay, Morita, & others. 1989;48:S93-5\*

Kay PH. *see* Eng, Ravichandran, & others. 1989;48:813-5\*

Kayser KL. *see* Johnson, Brenowitz, & Kayser. 1989;48:19-25\*

Kazui T. *see* Wada, Komatsu, & Kazui. 1989;48:S38-40\*

Keith SC. *see* Baisden, Sand, & others. 1989;48:432-4,CR

Keller SM, Groshen S, & Kaiser LR. Blood transfusion and lung cancer recurrence. 1989;48:746,CP

Keon WJ. Myocardial preservation: the role of magnesium. Reply. 1989;48:145,CP

Keon WJ. *see* Robblee, Crosby, & Keon. 1989;48:575-6,CR

Keshishian JM. *see* Finelli, Piasio, & others. 1989;48:582-3,CR

Khalil KG. Endoscopic relief of malignant airway obstruction. 1989;48:474,DI

Khan MY. *see* Gabbay, Guindry, & others. 1989;48:803-12\*

Kikuchi K. *see* Masuda, Ogata, & others. 1989;48:376-80\*

Kim Y-D. *see* Lui, McKenzie, & others. 1989;48:113-5,CR

Kirk AJB, Hilton CJ, & Dark JH. Extraction of cardiopulmonary grafts. 1989;48:145-6,CP

Kirklin JK, Kirklin JW, Blackstone EH, & Pacifico AD. Effect of transannular patching on outcome after repair of tetralogy of Fallot. 1989;48:783-91\*

Kirklin JW. *see* Fernandez, Costa, & others. 1989;48:654-9\*

Kirklin JW. *see* Kirklin, Kirklin, & others. 1989;48:783-91\*

Kirschner PA. Endoscopic relief of malignant airway obstruction. 1989;48:474,DI

Kitamura S. Pharmacological responses of internal mammary artery grafts. Reply. 1989;48:747-8,CP

Kitano M. *see* Sakamoto, Yokota, & others. 1989;48:303-4,HW

Kitchin AH. *see* Walker, Reid, & others. 1989;48:528-35\*

Koike R, Suma H, Oku T, Satoh H, Sawada Y, & Takeuchi A. Combined coronary revascularization and splenectomy. 1989;48:853-4,CR

Kolff WJ, & Yu LS. The return of elastomer valves. 1989;48:S98-9\*

Komatsu S. *see* Abe, Tukamoto, & others. 1989;48:670-6\*

Komatsu S. *see* Wada, Komatsu, & Kazui. 1989;48:S38-40\*

Kongtahworn C. *see* Phillips, Gay, & others. 1989;48:129,HW

Konstam MA. *see* Diehl, Kaplan, & others. 1989;48:829-34\*

Konstantinov BA, Dzemeshkevich SL, Krasovskaya SM, Nenyukov AK, Budaev VN, Milovanova ZP, Gromova GV, Kudrina LL, & Lyudinovskaya RA. New cardiac bioprostheses: theory, experiments, and 10 years of clinical use. 1989;48:S79-80\*

Konstantinov BA, Ivanov VA, Tarichko YV, Prelatov VA, & Dzemeshkevich SL. Plastic surgery for cardiac valves: 15 years' experience. 1989;48:S77-8\*

Kontos GJ, Schaff HV, Orszulak TA, Puga FJ, Pluth JR, & Danielson GK. Thrombotic obstruction of disc valves: clinical recognition and surgical management. 1989;48:60-5\*

Koolen JJ. *see* Smulders, Wepking, & others. 1989;48:540-3\*

Kopel ME, Riemersma L, Finlayson DC, Tobia V, Jones EL, Hall RI, Mullins R, & Lampasona V. Gentamicin solution for mediastinal irrigation: systemic absorption, bactericidal activity, and toxicity. 1989;48:228-31\*

Kormos RL. *see* Trento, Griffith, & others. 1989;48:617-23\*

Kormos RL. *see* Zenati, Dowling, & others. 1989;48:882-6,CR

Koshal A. *see* Todd, Goldberg, & others. 1989;48:146,CP

Kosker S. *see* Braimbridge, Darracott-Cankovic, & others. 1989;48:S67-8\*

Kottke BA. *see* Finck, Mashburn, & others. 1989;48:646-50\*

Kouchoukos NT. Aortic graft-valve (composite) replacement at 20 years: wrap or no wrap? Shunt or no shunt? 1989;48:615-6,ED

Kouchoukos NT. *see* Marshall, Barzilai, & others. 1989;48:339-44\*

Kouno J. *see* Shirakusa, Ueda, & others. 1989;48:779-82\*

Kramer MD. *see* Acinapura, Rose, & others. 1989;48:186-91\*

Krasovskaya SM. *see* Konstantinov, Dzemeshkevich, & others. 1989;48:S79-80\*

Kreiner G. *see* Markovitz, Savage, & others. 1989;48:838-45\*

Kreis A. *see* Diehl, Kaplan, & others. 1989;48:829-34\*

Kron IL, Lerman BB, Haines DE, Flanagan TL, & DiMarco JP. Coronary artery bypass grafting in patients with ventricular fibrillation. 1989;48:85-9\*

Kuchler JA. *see* Antinori, Villanueva, & others. 1989;48:440,HW

Kudrina LL. *see* Konstantinov, Dzemeshkevich, & others. 1989;48:S79-80\*

Kugelberg J. *see* Johnsson, Messeter, & others. 1989;48:769-75\*

Kugler JD. *see* Fleming, Sarafian, & others. 1989;48:404-8\*

Kuki S. *see* Matsuda, Sawa, & others. 1989;48:242-6\*

Kurlansky PA, Rose EA, & Malm JR. Adjustable annuloplasty for tricuspid insufficiency. 1989;48:457,CP

Kyoku I. *see* Sakamoto, Yokota, & others. 1989;48:303-4,HW

Lackey VL, Reagan MT, Smith RA, & Anderson WJ. Neoadjuvant therapy of squamous cell carcinoma of the esophagus: role of resection and benefit in partial responders. 1989;48:218-21\*

Lacquet LK. *see* van Son, Daniels, & others. 1989;48:496-502\*

Laks H. The arterial switch procedure for the neonate: coming of age. 1989;48:3-4, ED

Lambert CJ. Bleeding and anticoagulation. 1989;48:454-5,CP

Lammermeier DE, Nakatani T, Sweeney MS, Van Buren CT, Macris MP, Duncan JM, & Frazier OH. Effect of prior cardiac surgery on survival after heart transplantation. 1989;48:168-72\*

Lampasona V. *see* Kopel, Riemersma, & others. 1989;48:228-31\*

Larsson S, Lycke G, & Radberg G. Replacement of the esophagus by a segment of colon provided with an antireflux valve. 1989;48:677-82\*

Laub GW. Percutaneous venous cannula. 1989;48:610,CP

Leach CL. *see* Smith & Leach. 1989;48:610,CP

Lee M-C. *see* Chang, Lee, & others. 1989;48:409-12\*

Lee ME. Can ventricular decompression be optimized? 1989;48:454,CP

Lehot JJ. *see* Durand, Bastien, & others. 1989;48:888-9,CP

Lekven J. *see* Mask, Abd-Elfattah, & others. 1989;48:109-12\*

Lemmer JH Jr, Winniford MD, & Ferguson DW. Surgical implications of atrial septal defect complicating aortic balloon valvuloplasty. 1989;48:295-7,CR

Lemole G. *see* Niebauer, Oz, & others. 1989;48:523-7\*

Lemole GM. *see* Serra, McNicholas, & others. 1989;48:689-92\*

Lerman BB. *see* Kron, Lerman, & others. 1989;48:85-9\*

Levin B. *see* Weinstein & Levin. 1989;48:490-5\*

Lewis I. *see* Page, Russell, & others. 1989;48:514-7\*

Lewis JW Jr. *see* Magilligan, Lewis, & others. 1989;48:324-30\*

Lewis MJ. *see* Angelini, Christie, & others. 1989;48:417-20\*

Libertino JA. *see* Shahian, Nieh, & Libertino. 1989;48:421-2,CR

Lichtenstein SV. *see* Blum, Panos, & others. 1989;48:709-11,CR

Lichtenstein SV. *see* Christakis, Panos, & others. 1989;48:592-4,HW

Lichtenstein SV. *see* Panos, Christakis, & others. 1989;48:816-9\*

Liebler GA. *see* Magovern, Liebler, & others. 1989;48:S33-4\*

Lillehei CW, Nakib A, Kaster RL, Kalke BR, & Rees JR. The origin and development of three new mechanical valve designs: toroidal disc, pivoting disc, and rigid bileaflet cardiac prostheses. 1989;48:S35-7\*

Lillington GA. Hazards of transthoracic needle biopsy of the lung. 1989;48:163-4,ED

Lin P-J. *see* Chang, Lee, & others. 1989;48:409-12\*

Lipsius SL. *see* Lonchyna & Lipsius. 1989;48:145,CP

Little AG. *see* Segalin, Little, & others. 1989;48:267-71\*

Livi U. *see* Stellin, Mazzucco, & others. 1989;48:577-8,CR

Llesuy S. *see* Ferreira, Burgos, & others. 1989;48:77-84\*

Longhyna VA, & Lipsius SL. Myocardial preservation: the role of magnesium. 1989;48:145,CP

Lorell BH. *see* Johnson, Thurer, & others. 1989;48:855-6,CR

Lui RC, McKenzie FN, Kim Y-D, & Senderoff E. Primary endobronchial granular cell myoblastoma. 1989;48:113-5,CR

Luxenberg MG. *see* Sturm, Luxenberg, & others. 1989;48:697-8\*

Lycke G. *see* Larsson, Lycke, & Radberg. 1989;48:677-82\*

Lyudinovskaya RA. *see* Konstantinov, Dzemeshkevich, & others. 1989;48:S79-80\*

MacBride LR. *see* Fiore, Naunheim, & others. 1989;48:104-8\*

Macris MP. *see* Lammermeier, Nakatani, & others. 1989;48:168-72\*

Madonik MM. *see* Weisel, Mickle, & others. 1989;48:503-7\*

Madsen R. *see* Curtis, Nawarawong, & others. 1989;48:764-8\*

Magilligan DJ, Lewis JW Jr, Stein P, & Alam M. The porcine bioprosthetic heart valve: experience at 15 years. 1989;48:324-30\*

Magovern GJ, Liebler GA, Park SB, Burkholder JA, Sakert T, & Simpson KA. Twenty-five-year review of the Magovern-Cromie sutureless aortic valve. 1989;48:S33-4\*

Maher KL. *see* Schwieger, Gallagher, & others. 1989;48:51-3\*

Mahfood S. *see* Finelli, Piasio, & others. 1989;48:582-3,CR

Mallya K. *see* Arbit, Galichich, & others. 1989;48:820-3\*

Malm JR. *see* Kurlansky, Rose, & Malm. 1989;48:457,CP

Mangschau A, Geiran O, Rootwelt K, Forfang K. Impairment in right ventricular performance after left ventricular aneurysm operation. Reply. 1989;48:889,CP

Mansour KA, & Downey RS. Esophageal carcinoma: surgery without preoperative adjuvant chemotherapy. 1989;48:201-5\*

Manuele VJ. *see* Antinori, Villanueva, & others. 1989;48:440,HW

Markovitz LJ, Savage EB, Ratcliffe MB, Bavaria JE, Kreiner G, Iozzo RV, Hargrove WC III, Bogen DK, & Edmunds LH Jr. Large animal model of left ventricular aneurysm. 1989;48:838-45\*

Marshall WG Jr, Barzilai B, Kouchoukos NT, & Saffitz J. Intraoperative ultrasonic imaging of the ascending aorta. 1989;48:339-44\*

Martin TC. *see* Canter, Sekarski, & others. 1989;48:544-50\*

Marvasti MA. *see* Rosenberg, Bredenberg, & others. 1989;48:508-13\*

Masaki H. *see* Fujiwara, Nogami, & others. 1989;48:518-22\*

Mashburn JP. *see* Finck, Mashburn, & others. 1989;48:646-50\*

Mask WK, Abd-Elfattah AS, Jessen M, Brunsting LA, Lekven J, & Wechsler AS. Embryonic versus adult myocardium: adenosine nucleotide degradation during ischemia. 1989;48:109-12\*

Masuda H, Ogata T, Kikuchi K, & Tanaka S. Longevity of expanded polytetrafluoroethylene grafts for superior vena cava. 1989;48:376-80\*

Mathisen DJ, & Grillo HC. Endoscopic relief of malignant airway obstruction. 1989;48:469-75\*

Matsuba K. *see* Shirakusa, Ueda, & others. 1989;48:779-82\*

Matsuda H, Sawa Y, Kuki S, Nomura F, Ohtani M, Takami H, Shirakura R, Nakano S, & Kawashima Y. Evaluation of prostacyclin analogue OP-41483 as an adjunct to crystalloid cardioplegia in infants and children. 1989;48:242-6\*

Matsuda H. *see* Kawamoto, Nakano, & others. 1989;48:723-4,CR

Matsuda H. *see* Shirakura, Kawashima, & others. 1989;48:124-5,CR

Matsuoka S. *see* Fujiwara, Nogami, & others. 1989;48:518-22\*

Matthews J. *see* Garrett & Matthews. 1989;48:305,HW

Mattox KL. Fact and fiction about management of aortic transection. 1989;48:1-2, ED

Maughan J. *see* Mitchell, Prabhakar, & others. 1989;48:699-703\*

Mavroudis C. *see* Gray, Ganzel, & others. 1989;48:222-7\*

Mazzucco A. *see* Stellin, Mazzucco, & others. 1989;48:577-8,CR

McAlister W. *see* Weinhaus, Canter, & others. 1989;48:206-12\*

McBride LR, Miller LW, Naunheim KS, & Pennington DG. Axillary artery insertion of an intraaortic balloon pump. 1989;48:874-5,CR

McClenathan JH, & Okada F. Primary neurilemoma of the diaphragm. 1989;48:126-8,CR

McElvein RB. Endoscopic relief of malignant airway obstruction. 1989;48:473,DI

McElvein RB. Treatment of malignant tracheobronchial obstruction. 1989;48:463-4,ED

McFalls EO, Palac R, Gately H, & Floten HS. Pseudoaneurysm formation with superior vena caval syndrome 7 years after aortic composite graft placement. 1989;48:704-5,CR

McGiffin DC. *see* O'Brien, McGiffin, & Stafford. 1989;48:600-9,CV

McGoldrick JP. *see* Smyth, Scott, & others. 1989;48:744,CP

McGough EC. *see* Shaddy & McGough. 1989;48:298-300,CR

McKay R, Miyamoto S, Peart I, Battistessa SA, Wren C, Cunliffe M, & Robles A. Truncus arteriosus with interrupted aortic arch: successful correction in a neonate. 1989;48:587-9,CR

McKenzie FN. *see* Lui, McKenzie, & others. 1989;48:113-5,CR

McKneally MF. *see* Piantadosi, Moores, & McKneally. 1989;48:746-7,CP

McMurtrey MJ. *see* Wahi, McMurtrey, & others. 1989;48:33-7\*

McNally R, Barwick R, Morse BS, Rhodes P. Actuarial analysis of a uniform and reliable preservation method for viable heart valve allografts. 1989;48:S83-4\*

McNicholas KW. *see* Serra, McNicholas, & others. 1989;48:689-92\*

Mearns AJ. *see* Eng, Pradhan, & others. 1989;48:287-8,CR

Mee RBB. *see* Iyer, Varma, & Mee. 1989;48:776-8\*

Melissano G. *see* Alajmo, Calamai, & others. 1989;48:536-9\*

Mendez M. *see* Kay, Morita, & others. 1989;48:S93-5\*

Menkis AH. *see* Todd, Goldberg, & others. 1989;48:146,CP

Merrill WH. *see* Frist, Winterland, & others. 1989;48:863-4,CR

Messeter K. *see* Johnsson, Messeter, & others. 1989;48:769-75\*

Messmer BJ. *see* Minale, Nikol, & others. 1989;48:235-41\*

Meyer JA. Gotthard Bülau and closed water-seal drainage for empyema, 1875-1891. 1989;48:597-9,CL

Michaelis LL. Long-term survival after postinfarction bypass operation: early versus late operation. 1989;48:762,DI

Mickle DAG. *see* Rebeyka, Wilson, & others. 1989;48:397-403\*

Mickle DAG. *see* Weisel, Mickle, & others. 1989;48:503-7\*

Midgley FM. *see* Ceithaml, Midgley, & Perry. 1989;48:413-6\*

Mikhail AA, Ellis R, & Johnson S. Eighteen-year evolution from the Lillehei-Kaster valve to the Omni design. 1989;48:S61-4\*

Milei J. *see* Ferreira, Burgos, & others. 1989;48:77-84\*

Milford E. *see* Crawford, Milford, & others. 1989;48:S100-2\*

Miller LW. *see* McBride, Miller, & others. 1989;48:874-5,CR

Miller RR, & Nelems B. Mediastinal lymph node necrosis: a newly recognized complication of mediastinoscopy. 1989;48:247-50\*

Mills NL. Internal mammary artery bypass grafting: influence on recurrent angina and survival in 2,100 patients. 1989;48:191,DI

Mills NL. Saphenous vein graft valves: "the bad guys". 1989;48:613-4,ED

Milo S, Mohr R, & Goor DA. Right ventricular pressure dynamics after operation for pulmonary stenosis. 1989;48:572-4\*

Milovanova ZP. *see* Konstantinov, Dzemeshkevich, & others. 1989;48:S79-80\*

Minale C, Nikol S, Zander M, Uebis R, Effert S, & Messmer BJ. Controversial aspects of coronary endarterectomy. 1989;48:235-41\*

Mitchell IM, Prabhakar G, Maughan J, & Taylor DN. Pulmonary artery versus left ventricular venting: a radioisotope study of left ventricular function. 1989;48:699-703\*

Mitsudomi T, Tateishi M, Oka T, Nishino T, Ishida T, & Sugimachi K. Dorsal mass in hyperparathyroidism secondary to chronic renal failure. 1989;48:426-7,CR

Mitsudomi T, Tateishi M, Oka T, Yano T, Ishida T, & Sugimachi K. Longer survival after resection of non-small cell lung cancer in Japanese women. 1989;48:639-42\*

Mitsudomi T. *see* Ishida, Oka, & others. 1989;48:90-5\*

Mitsui K. *see* Akaogi, Mitsui, & others. 1989;48:116-8,CR

Miyagishima RT. *see* Jamieson, Burr, & others. 1989;48:173-85\*

Miyamoto S. *see* McKay, Miyamoto, & others. 1989;48:587-9,CR

Mizuhara H. *see* Sakamoto, Yokota, & others. 1989;48:303-4,HW

Moggio RA. *see* Praeger, Pooley, & others. 1989;48:835-7\*

Mohr R. *see* Milo, Mohr, & Goor. 1989;48:572-4\*

Molina JE. Nonreversed saphenous vein grafts for coronary artery bypass grafting. 1989;48:624-7\*

Molteni L. *see* Ferreira, Burgos, & others. 1989;48:77-84\*

Montañá J. *see* Saumench, Escarrabill, & others. 1989;48:272-4\*

Montero CG, Mula N, Brugos R, Pradas R, & Figuera D. Thrombectomy of the Björk-Shiley prosthetic valve revisited: long-term results. 1989;48:824-8\*

Moores DWO. *see* Piantadosi, Moores, & McKneally. 1989;48:746-7,CP

Mori F. *see* Gohra, Mori, & Esato. 1989;48:96-103\*

Morikawa M. *see* Abe, Tukamoto, & others. 1989;48:670-6\*

Morita S. *see* Kay, Morita, & others. 1989;48:S93-5\*

Morse BS. *see* McNally, Barwick, & others. 1989;48:S83-4\*

Moseley PW. *see* Scott, Stowe, & others. 1989;48:213-7\*

Moudry BM. *see* Sturm, Luxenberg, & others. 1989;48:697-8\*

Moulijn AC. *see* Smulders, Wepking, & others. 1989;48:540-3\*

Moulton AL. *see* Fleming, Sarafian, & others. 1989;48:404-8\*

Mountain CF. *see* Wahi, McMurtrey, & others. 1989;48:33-7\*

Muehrcke DD, & Donnelly RJ. Complications after esophagogastricectomy using stapling instruments. 1989;48:257-62\*

Muehrcke DD, & Szarnicki RJ. Use of pericardium to control bleeding after ascending aortic graft replacement. 1989;48:706-8,CR

Mula N. *see* Montero, Mula, & others. 1989;48:824-8\*

Mulder DG, Graves M, & Herrmann C. Thymectomy for myasthenia gravis: recent observations and comparisons with past experience. 1989;48:551-5\*

Mulder DG, Kattus A, & Drinkwater DC. Long-term survival after triple-valve replacement. 1989;48:289-91,CR

Mullen PE. *see* Baisden, Sand, & others. 1989;48:432-4,CR

Müller LC, Salzer GM, Ransmayr G, & Neiss A. Intraoperative cryoanalgesia for postthoracotomy pain relief. 1989;48:15-8\*

Mullins R. *see* Kopel, Riemersma, & others. 1989;48:228-31\*

Munro AI. *see* Jamieson, Burr, & others. 1989;48:173-85\*

Murayama F. *see* Nagaoka, Innami, & others. 1989;48:798-802\*

Murday A. *see* Eng, Ravichandran, & others. 1989;48:813-5\*

Murday A. *see* Tsang, Murday, & others. 1989;48:632-5\*

Murphy MC, Newman BM, & Rodgers BM. Pleuroperitoneal shunts in the management of persistent chylothorax. 1989;48:195-200\*

Murray GF. *see* Gustafson, Murray, & others. 1989;48:43-50\*

Muster AJ. *see* Backer, Ilbawi, & others. 1989;48:10-4\*

Mycyk T. *see* Teasdale, Zulys, & others. 1989;48:712-3,CR

Naftel DC. *see* Fernandez, Costa, & others. 1989;48:654-9\*

Nagaoka H, Innami R, Watanabe M, Satoh M, Murayama F, & Funakoshi N. Preservation of pancreatic beta cell function with pulsatile cardiopulmonary bypass. 1989;48:798-802\*

Nakano S. *see* Kawamoto, Nakano, & others. 1989;48:723-4,CR

Nakano S. *see* Matsuda, Sawa, & others. 1989;48:242-6\*

Nakata S, Campbell CD, & Reppogle RL. Experimental artery bypass grafting using a CO<sub>2</sub> laser on the dog: Acute experiment. 1989;48:628-31\*

Nakatani T. *see* Lammermeier, Nakatani, & others. 1989;48:168-72\*

Nakatsuka M, Colquhoun A, & Gehr L. Right ventricular function and high-frequency positive-pressure ventilation during coronary artery bypass grafting. 1989;48:263-6\*

Nakib A. *see* Lillehei, Nakib, & others. 1989;48:S35-7\*

Naunheim KS. *see* Fiore, Naunheim, & others. 1989;48:104-8\*

Naunheim KS. *see* McBride, Miller, & others. 1989;48:874-5,CR

Nawarawong W. *see* Curtis, Nawarawong, & others. 1989;48:764-8\*

Neiss A. *see* Müller, Salzer, & others. 1989;48:15-8\*

Nelems B. *see* Miller & Nelems. 1989;48:247-50\*

Nelson RJ. *see* de Virgilio, Dubrow, & others. 1989;48:119-21,CR

Nenyukov AK. *see* Konstantinov, Dzemeshkevich, & others. 1989;48:S79-80\*

Newman BM. *see* Murphy, Newman, & Rodgers. 1989;48:195-200\*

Newman MM. The olden days of surgery for tuberculosis. 1989;48:161-2,ED

Nicklas JM. *see* Deeb, Bolling, & others. 1989;48:665-9\*

Niebauer GW, Oz MC, Goldschmidt M, & Lemole G. Simultaneous use of microfibrillar collagen hemostat and blood saving devices in a canine kidney perfusion model. 1989;48:523-7\*

Nieh PT. *see* Shahian, Nieh, & Libertino. 1989;48:421-2,CR

Nikol S. *see* Minale, Nikol, & others. 1989;48:235-41\*

Nishida H, Grooters RK, Yeager AA, Soltanzadeh H, Thieman KC, & Schneider RF. Carotid and aortic arch endarterectomy using hypothermic arrest with coronary bypass. 1989;48:865-6,CR

Nishii H. *see* Sakamoto, Yokota, & others. 1989;48:303-4,HW

Nishimoto K. *see* Iwahara, Ino, & others. 1989;48:693-6\*

Nishino T. *see* Ishida, Oka, & others. 1989;48:90-5\*

Nishino T. *see* Mitsudomi, Tateishi, & others. 1989;48:426-7,CR

Noetzel M. *see* Weinhaus, Canter, & others. 1989;48:206-12\*

Noferi D. *see* Alajmo, Calamai, & others. 1989;48:536-9\*

Nogami A. *see* Fujiwara, Nogami, & others. 1989;48:518-22\*

Nomura F. *see* Matsuda, Sawa, & others. 1989;48:242-6\*

Norberto L. *see* Segalin, Little, & others. 1989;48:267-71\*

Nunnally LC. *see* Scott, Stowe, & others. 1989;48:213-7\*

Nuno IN. *see* Seyfer, Walsh, & others. 1989;48:284-6,CR

Nussmeier M. *see* de Virgilio, Dubrow, & others. 1989;48:119-21,CR

O'Brien MF, McGiffin DC, & Stafford EG. Allograft aortic valve implantation: techniques for all types of aortic valve and root pathology. 1989;48:600-9,CV

Ochsner JL. Early bypass operation after acute myocardial infarction. 1989;48:750-1,ED

Ochsner JL. *see* Horowitz, Culpepper, & others. 1989;48:444-50,CT

Ogata T. *see* Masuda, Ogata, & others. 1989;48:376-80\*

Ohtake S. *see* Backer, Ilbawi, & others. 1989;48:10-4\*

Ohtani M. *see* Matsuda, Sawa, & others. 1989;48:242-6\*

Oka T. *see* Ishida, Oka, & others. 1989;48:90-5\*

Oka T. *see* Mitsudomi, Tateishi, & others. 1989;48:426-7,CR

Oka T. *see* Mitsudomi, Tateishi, & others. 1989;48:639-42\*

Okada F. *see* McClenathan & Okada. 1989;48:126-8,CR

Okies JE. Cardiac valve replacement in the elderly: clinical performance of biological prostheses. 1989;48:185,DI

Okike ON. *see* Vander Salm, Okike, & others. 1989;48:315-6,CP

Oku T. *see* Koike, Suma, & others. 1989;48:853-4,CR

Oldham HN Jr. Factors influencing long-term (10-year to 15-year) survival after a successful coronary artery bypass operation. 1989;48:24,DI

Olinger GN. *see* Almassi & Olinger. 1989;48:610,CP

Olsen CO. Coronary-subclavian steal after coronary artery bypass grafting using the internal mammary artery. Reply. 1989;48:887,CP

Olsen JD. *see* Watts, Jones, & others. 1989;48:590-1,CR

Orszulak TA. *see* Finck, Mashburn, & others. 1989;48:646-50\*

Orszulak TA. *see* Kontos, Schaff, & others. 1989;48:60-5\*

Oury JH. *see* Angell, Oury, & others. 1989;48:S89-90\*

Oyer PE. *see* Dein, Oyer, & others. 1989;48:350-5\*

Oz MC. *see* Niebauer, Oz, & others. 1989;48:523-7\*

Pacifico AD. *see* Kirklin, Kirklin, & others. 1989;48:783-91\*

Padró L. *see* Saumench, Escarrabill, & others. 1989;48:272-4\*

Page A. *see* Verdant, Page, & Baillot. 1989;48:686-8\*

Page R, Russell GN, Fox MA, Fabri BM, Lewis I, & Williots T. Hard-shell cardiotomy reservoir for reinfusion of shed mediastinal blood. 1989;48:514-7\*

Page RD, Jeffrey RR, & Donnelly RJ. Thoracoscopy: a review of 121 consecutive surgical procedures. 1989;48:66-8\*

Palac R. *see* McFalls, Palac, & others. 1989;48:704-5,CR

Palantianos GM, Thurer RJ, Pompeo MQ, & Kaiser GA. Clinical experience with subxiphoid drainage of pericardial effusions. 1989;48:381-5\*

Palmarini MF. *see* Alajmo, Calamai, & others. 1989;48:536-9\*

Palminiello A. *see* Alajmo, Calamai, & others. 1989;48:536-9\*

Pandian NG. *see* Diehl, Kaplan, & others. 1989;48:829-34\*

Panos A, Christakis G, Lichtenstein SV, Witnich C, El-Dalati H, & Salerno TA. Operation for acute postinfarction mitral

insufficiency using continuous oxygenated blood cardiopulmonary bypass. 1989;48:816-9\*

Panos A. *see* Blum, Panos, & others. 1989;48:709-11,CR

Panos A. *see* Christakis, Panos, & others. 1989;48:592-4,HW

Pappas G. *see* Vigneswaran, Campbell, & others. 1989;48:560-4\*

Park I. *see* Iwahara, Ino, & others. 1989;48:693-6\*

Park SB. *see* Magovern, Liebler, & others. 1989;48:S33-4\*

Parker EF. *see* Reed, Parker, & Crawford. 1989;48:165-7\*

Parker FB Jr. *see* Rosenberg, Bredenberg, & others. 1989;48:508-13\*

Parnell VA Jr. Internal banding for truncus arteriosus. 1989;48:610,CP

Parsonnet V, & Bernstein AD. Transvenous pacing: a seminal transition from the research laboratory. 1989;48:738-40,CV

Pasque MK. *see* Vander Salm, Okike, & others. 1989;48:315-6,CP

Patterson GA. *see* Todd, Goldberg, & others. 1989;48:146,CP

Patton G. *see* Cohn, Hubbard, & Patton. 1989;48:309-14,CV

Patwardhan A. *see* Kaul, Patwardhan, & Chaukar. 1989;48:456,CP

Paul MH. *see* Backer, Ilbawi, & others. 1989;48:10-4\*

Pauling FW. *see* Pezzella, Fall, & others. 1989;48:859-62,CR

Payne DD. *see* Diehl, Kaplan, & others. 1989;48:829-34\*

Payne WS. Heller's contribution to the surgical treatment of achalasia of the esophagus. 1989;48:876-81,CL

Peart I. *see* McKay, Miyamoto, & others. 1989;48:587-9,CR

Pecora DV. Thoracotomy through the auscultatory triangle. 1989;48:748,CP

Peigh PS. *see* Cohn, Peigh, & others. 1989;48:69-71\*

Perice EC. Are oxygenators (airplanes, oil spills, pesticides) safe? 1989;48:467-8,ED

Peitzman AB. *see* Pevec, Udekuwu, & Peitzman. 1989;48:139-42,CT

Pelletier CL. Cardiac valve replacement in the elderly: Clinical performance of biological prostheses. 1989;48:185,DI

Pelton JJ, & Ratner IA. A technique of airway management in children with obstructed airway due to tumor. 1989;48:301-2,HW

Peniston CM. *see* Christakis, Panos, & others. 1989;48:592-4,HW

Pennington DG. Can ventricular decompression be optimized? Reply. 1989;48:454,CP

Pennington DG. *see* Fiore, Naunheim, & others. 1989;48:104-8\*

Pennington DG. *see* McBride, Miller, & others. 1989;48:874-5,CR

Peracchia A. *see* Segalin, Little, & others. 1989;48:267-71\*

Perier P, Deloche A, Chauvaud S, Chachques JC, Relland J, Fabiani JN, Stephan Y, Blondeau P, & Carpentier A. A 10-year comparison of mitral valve replacement with Carpentier-Edwards and Hancock porcine bioprostheses. 1989;48:54-9\*

Perna AM. *see* Alajmo, Calamai, & others. 1989;48:536-9\*

Perry JF Jr. *see* Sturm, Luxenberg, & others. 1989;48:697-8\*

Perry LW. *see* Ceithaml, Midgley, & Perry. 1989;48:413-6\*

Peters RM. *Atlas of Pulmonary Resections, Second Edition.* 1989;48:89,RV

Peters RM. *Decision Making in Surgery of the Chest.* 1989;48:250,RV

Peters RM. Empyema thoracis: historical perspective. 1989;48:306-8,CL

Peters RM. *Interventional Cardiology,* 1989;48:669,RV

Peters RM. *The Works of William Harvey,* 1989;48:669,RV

Pevec WC, Udekuwu AO, & Peitzman AB. Blunt rupture of the myocardium. 1989;48:139-42,CT

Pezzella AT, Fall SM, Pauling FW, & Sadler TR. Solitary plasma-celloma of the sternum: surgical resection with long-term follow-up. 1989;48:859-62,CR

Pezzella AT. *see* Vander Salm, Okike, & others. 1989;48:315-6,CP

Phillips SJ, Gay J, Chandramouli B, Spector M, Kongtahworn C, & Zeff RH. Use of a double-lumen pressure monitoring catheter to facilitate pulmonary artery banding. 1989;48:129,HW

Piantadosi S, Moores DWO, & McKneally MF. Blood transfusion and lung cancer recurrence. Reply. 1989;48:746-7,CP

Piasio M. *see* Finelli, Piasio, & others. 1989;48:582-3,CR

Picone AL. *see* Symbas, Vlasis-Hale, & others. 1989;48:192-4\*

Pilot LR. Heart valve legislation and regulation. 1989;48:S103-5\*

Pittman J, Fehrenbacher J, Pittman S, & Beckman D. Improved visualization of the internal mammary artery with a new retractor system. 1989;48:869-70,CR

Pittman S. *see* Pittman, Fehrenbacher, & others. 1989;48:869-70,CR

Pluth JR. *see* Kontos, Schaff, & others. 1989;48:60-5\*

Pomerantzoff PMA, Zerbini EJ, Verginelli G, & Jatene AD. Valve replacement in the Heart Institute, University of Sao Paulo, Brazil. 1989;48:S41-4\*

Pompeo MQ. *see* Palantianos, Thurer, & others. 1989;48:381-5\*

Pooley RW. *see* Praeger, Pooley, & others. 1989;48:835-7\*

Pories WJ. *see* Chitwood, Bost, & others. 1989;48:292-4,CR

Prabhakar G. *see* Mitchell, Prabhakar, & others. 1989;48:699-703\*

Pradas R. *see* Montero, Mula, & others. 1989;48:824-8\*

Pradhan GN. *see* Eng, Pradhan, & others. 1989;48:287-8,CR

Praeger PI, Pooley RW, Moggio RA, Somberg ED, Sarabu MR, & Reed GE. Simplified method for reoperation on the mitral valve. 1989;48:835-7\*

Prelatov VA. *see* Konstantinov, Ivanov, & others. 1989;48:S77-8\*

Pretelli P. *see* Alajmo, Calamai, & others. 1989;48:536-9\*

Puel P. *see* Roux, Fournial, & others. 1989;48:595-6,HW

Puga FJ. *see* Kontos, Schaff, & others. 1989;48:60-5\*

Pulsinelli W. *see* Gold, Pulsinelli, & others. 1989;48:643-5\*

Quaegebeur JM. *see* Angelini, Witsenburg, & others. 1989;48:714-6,CR

Quahliero D. *see* Chatson, Gallagher, & others. 1989;48:719-20,CR

Radberg G. *see* Larsson, Lycke, & Radberg. 1989;48:677-82\*

Radovancevic B. *see* Duncan, Frazier, & others. 1989;48:733-5,HW

Rainer WG. STS presidential message to membership. 1989;48:749,ED

Ramirez Schon G, Suarez Nieves AS, & Cebollero Marcucci J. Gastric vascular pedicle patch esophagoplasty for stricture. 1989;48:356-8\*

Randolph JD, Toal K, Stelzer P, & Elkins RC. Aortic valve and left ventricular outflow tract replacement using allograft and autograft valves: a preliminary report. 1989;48:345-9\*

Rao PS. *see* Weinstein, Rao, & others. 1989;48:72-6\*

Ratcliffe MB. *see* Markowitz, Savage, & others. 1989;48:838-45\*

Ratner IA. *see* Pelton & Ratner. 1989;48:301-2,HW

Ravichandran PS. *see* Eng, Ravichandran, & others. 1989;48:813-5\*

Reagan MT. *see* Lackey, Reagan, & others. 1989;48:218-21\*

Rebeyka IM, Wilson GJ, Axford-Gatley RA, Romaschin AD, & Mickle DAG. Asanguineous reperfusion in a canine model of cardiopulmonary bypass and controlled postischemic work. 1989;48:397-403\*

Reed CE, Parker EF, & Crawford FA Jr. Surgical resection for complications of pulmonary tuberculosis. 1989;48:165-7\*

Reed GE. *see* Praeger, Pooley, & others. 1989;48:835-7\*

Rees JR. *see* Lillehei, Nakib, & others. 1989;48:S35-7\*

Reid KG. *see* Walker, Reid, & others. 1989;48:528-35\*

Relland J. *see* Perier, Deloche, & others. 1989;48:54-9\*

Replogle RL. *see* Nakata, Campbell, & others. 1989;48:628-31\*

Reves JG, & Greeley WJ. Cerebral blood flow during cardiopulmonary bypass: some new answers to old questions. 1989;48:752-4,ED

Rhodes P. *see* McNally, Barwick, & others. 1989;48:583-4\*

Riemersma L. *see* Kopel, Riemersma, & others. 1989;48:228-31\*

Ring WS. Effect of prior cardiac surgery on survival after heart transplantation. 1989;48:172,DI

Robblee JA, Crosby E, & Keon WJ. Hypoxemia after intraluminal oxygen line obstruction during cardiopulmonary bypass. 1989;48:575-6,CR

Robertazzi RR. *see* Acinapura, Rose, & others. 1989;48:186-91\*

Robertson JM. *see* de Virgilio, Dubrow, & others. 1989;48:119-21,CR

Robicsek F. *see* Hess, Howe, & others. 1989;48:6-9\*

Robinson LA. *see* Fleming, Sarafian, & others. 1989;48:404-8\*

Robles A. *see* McKay, Miyamoto, & others. 1989;48:587-9,CR

Rodgers BM, & Tribble CG. Pneumothorax in cystic fibrosis. 1989;48:743-4,CP

Rodgers BM. *see* Murphy, Newman, & Rodgers. 1989;48:195-200\*

Roe BB. A compression-molded leaflet prosthetic valve. 1989;48:526-7\*

Roe BB. Iatrogenic factors in cardiac valve evaluation. 1989;48:565-6\*

Roe BB. *Socioeconomics of Surgery*. 1989;48:283,RV

Rogers AT. *see* Wallenhaupt & Rogers. 1989;48:579-81,CR

Romaschin AD. *see* Rebeyka, Wilson, & others. 1989;48:397-403\*

Rootwelt K. *see* Mangschau, Geiran, & others. 1989;48:889,CP

Rose DM. *see* Acinapura, Rose, & others. 1989;48:186-91\*

Rose EA. *see* Kurlansky, Rose, & Malm. 1989;48:457, CP

Rosenberg JM, Bredenberg CE, Marvasti MA, Bucknam C, Conti C, & Parker FB Jr. Blunt injuries to the aortic arch vessels. 1989;48:508-13\*

Ross D. The versatile homograft and autograft valve. 1989;48:569-70\*

Ross IM. *see* Diehl, Kaplan, & others. 1989;48:829-34\*

Roth JA. *see* Wahi, McMurtrey, & others. 1989;48:33-7\*

Roux D, Fournial G, Glock Y, Dalous P, & Puel P. New helper instrument in cardiac surgery. 1989;48:595-6,HW

Rozar GE. *see* Gustafson, Murray, & others. 1989;48:43-50\*

Rubio-Alvarez J, Duran-Munoz D, Sierra-Quiroga J, & Garcia-Bengochea JB. Right heart endocarditis and endocardial pacemakers. 1989;48:147,CP

Ruffett D. *see* Chatson, Gallagher, & others. 1989;48:719-20,CR

Ruol A. *see* Segalin, Little, & others. 1989;48:267-71\*

Russell GN. *see* Page, Russell, & others. 1989;48:514-7\*

Ryding E. *see* Johnsson, Messeter, & others. 1989;48:769-75\*

Sabanathan S. *see* Eng, Pradhan, & others. 1989;48:287-8,CR

Sabanathan S. *see* Eng & Sabanathan. 1989;48:683-5\*

Sadler TR. *see* Pezzella, Fall, & others. 1989;48:859-62,CR

Saffitz J. *see* Marshall, Barzilai, & others. 1989;48:339-44\*

Saito T. *see* Shirakusa, Ueda, & others. 1989;48:779-82\*

Sakamoto K, Yokota M, Kyoku I, Kitano M, Mizuhara H, & Nishii H. An anterior longitudinal aortotomy with a distal aortic transection for the arterial switch operation. 1989;48:303-4,HW

Sakert T. *see* Magovern, Liebler, & others. 1989;48:S33-4\*

Saldahna PL. *see* Chitwood, Bost, & others. 1989;48:292-4,CR

Salerno TA. *see* Blum, Panos, & others. 1989;48:709-11,CR

Salerno TA. *see* Christakis, Panos, & others. 1989;48:592-4,HW

Salerno TA. *see* Panos, Christakis, & others. 1989;48:816-9\*

Salo JA. *see* Taskinen, Salo, & others. 1989;48:846-9\*

Salzer GM. *see* Müller, Salzer, & others. 1989;48:15-8\*

Sand ME. *see* Baisden, Sand, & others. 1989;48:432-4,CR

Sano T. *see* Shirakura, Kawashima, & others. 1989;48:124-5,CR

Santaspirt J. *see* Antinori, Villanueva, & others. 1989;48:440,HW

Sarabu MR. *see* Praeger, Pooley, & others. 1989;48:835-7\*

Sarafian LB. *see* Fleming, Sarafian, & others. 1989;48:404-8\*

Sato H. *see* Suma, Sato, & others. 1989;48:434-6,CR

Satoh H. *see* Koike, Suma, & others. 1989;48:853-4,CR

Satoh M. *see* Nagaoka, Innami, & others. 1989;48:798-802\*

Saumench J, Escarrabill J, Padró L, Montana J, Clariana A, & Cantó A. Value of fiberoptic bronchoscopy and angiography for diagnosis of the bleeding site in hemoptysis. 1989;48:272-4\*

Savage EB. *see* Markovitz, Savage, & others. 1989;48:838-45\*

Sawa Y. *see* Matsuda, Sawa, & others. 1989;48:242-6\*

Sawada Y. *see* Koike, Suma, & others. 1989;48:853-4,CR

Schaefer PS. *see* Edwards, Schaefer, & others. 1989;48:556-9\*

Schaff HV. *see* Kontos, Schaff, & others. 1989;48:60-5\*

Schmaltz RA. *see* Curtis, Nawarawong, & others. 1989;48:764-8\*

Schneider RF. *see* Coster, Gorton, & others. 1989;48:386-9\*

Schneider RF. *see* Nishida, Grooters, & others. 1989;48:865-6,CR

Schoofs E. *see* Van Schil, Vaneerdeweg, & others. 1989;48:889-90,CP

Schroeder U. *see* Thermann, Bluemm, & others. 1989;48:565-7\*

Schumacher PD. *see* Scott, Stowe, & others. 1989;48:213-7\*

Schwieger IM, Gallagher CJ, Finlayson DC, Daly WL, & Maher KL. Incidence of Cell-Saver contamination during cardiopulmonary bypass. 1989;48:51-3\*

Scott JP. *see* Smyth, Scott, & others. 1989;48:744,CP

Scott ML, Stowe CL, Nunnally LC, Spector SD, Moseley PW, Schumacher PD, & Thompson PA. Mitral valve reconstruction in the elderly population. 1989;48:213-7\*

Seaver P. *see* Gabbay, Guindy, & others. 1989;48:803-12\*

Segalin A, Little AG, Ruol A, Ferguson MK, Bardini R, Norberto L, Skinner DB, & Peracchia A. Surgical and endoscopic palliation of esophageal carcinoma. 1989;48:267-71\*

Sekarski DC. *see* Canter, Sekarski, & others. 1989;48:544-50\*

Sell J. *see* Cohn, Peigh, & others. 1989;48:69-71\*

Selle JG. *see* Hess, Howe, & others. 1989;48:6-9\*

Senderoff E. *see* Lui, McKenzie, & others. 1989;48:113-5,CR

Serra AJ, McNicholas KW, Spagna PM, Karmilowicz NP, & Lemole GM. Replacement of the descending thoracic aorta with intraluminal ring graft. 1989;48:689-92\*

Sethi GK. *see* Vasu, Icenogle, & others. 1989;48:315,CP

Seyfer AE, Walsh DS, Graeber GM, Nuno IN, & Eliasson AH. Chest wall implantation of lung cancer after thin-needle aspiration biopsy. 1989;48:284-6,CR

Shaddy RE, & McGough EC. Successful diagnosis and surgical treatment of single ventricle, truncus arteriosus. 1989;48:298-300,CR

Shafir R, Weiss J, Herman O, & Elami A. The danger in skin grafting the bare mediastinum after sternectomy for post-coronary bypass dehiscence. 1989;48:584-6,CR

Shahian DM, Nieh PT, & Libertino JA. Resection of atricaval adrenal carcinoma using hypothermic circulatory arrest. 1989;48:421-2,CR

Shahian DM, & Speert PK. Symptomatic visual deficits after open heart operations. 1989;48:275-9\*

Shalaby TZ. *see* Zwischenberger, Shalaby, & Conti. 1989;48:365-70\*

Shapiro N, Cohen AI, Wish M, Weston LJ, & Fletcher RD. Transdiaphragmatic implantation of the automatic implantable cardioverter defibrillator. 1989;48:371-5\*

Shieh M-J. *see* Chang, Lee, & others. 1989;48:409-12\*

Shields TW. *Thoracic Oncology*. 1989;48:502,RV

Shimazaki S. *see* Iwahara, Ino, & others. 1989;48:693-6\*

Shimazaki Y. *see* Shirakura, Kawashima, & others. 1989;48:124-5,CR

Shirakura R, Kawashima Y, Hirose H, Matsuda H, Shimazaki Y, & Sano T. Autopsy findings 14 years after septation for single ventricle. 1989;48:124-5,CR

Shirakura R. *see* Matsuda, Sawa, & others. 1989;48:242-6\*

Shirakusa T, Ueda H, Saito T, Matsuba K, Kuono J, & Hirota N. Surgical treatment of pulmonary aspergilloma and *Aspergillus* empyema. 1989;48:779-82\*

Shreiti I. *see* Eng, Ravichandran, & others. 1989;48:813-5\*

Shumway NE. *see* Dein, Oyer, & others. 1989;48:350-5\*

Siegel R, Davey TB, Kaufman B, & Goodenough SH. The full-orifice concept in prosthetic heart valves. 1989;48: S8-9\*

Siegel S. *see* de Virgilio, Dubrow, & others. 1989;48:119-21,CR

Sierra-Quiroga J. *see* Rubio-Alvarez, Duran-Munoz, & others. 1989;48:147,CP

Simpson KA. *see* Magovern, Liebler, & others. 1989;48:S33-4\*

Siposs GG. Memoirs of an early heart-valve engineer. 1989;48: S6-7\*

Skinner DB. *see* Segalin, Little, & others. 1989;48:267-71\*

Slater AD. *see* Gray, Ganzel, & others. 1989;48:222-7\*

Smith CR. Lessons learned in pediatric heart transplantation. 1989;48:622,DI

Smith RA. *see* Lackey, Reagan, & others. 1989;48:218-21\*

Smith TL. *see* Wahi, McMurtrey, & others. 1989;48:33-7\*

Smith VC, & Leach CL. Another method for tunneling defibrillator leads. 1989;48:610,CP

Smulders YM, Wiepkink ME, Moulijn AC, Koolen JJ, van Wezel HB, & Visser CA. How soon should drainage tubes be removed after cardiac operations? 1989;48:540-3\*

Smyth RL, Scott JP, McGoldrick JP, Higenbottam TW, Wallwork J. Heart-lung transplantation for pneumothorax in cystic fibrosis. 1989;48:744,CP

Sobel BE. *see* Bergmann & Sobel. 1989;48:319-21,ED

Sohara Y. *see* Akaogi, Mitsui, & others. 1989;48:116-8,CR

Soltanzadeh H. *see* Coster, Gorton, & others. 1989;48:386-9\*

Soltanzadeh H. *see* Nishida, Grooters, & others. 1989;48:865-6,CR

Somberg ED. *see* Praeger, Pooley, & others. 1989;48:835-7\*

Sovijärvi ARA. *see* Taskinen, Salo, & others. 1989;48:846-9\*

Spagna PM. *see* Serra, McNicholas, & others. 1989;48:689-92\*

Spector M. *see* Phillips, Gay, & others. 1989;48:129,HW

Spector ML. Heart-lung transplantation for pneumothorax in cystic fibrosis. Reply. 1989;48:745,CP

Spector ML. Pneumothorax in cystic fibrosis. Reply. 1989;48: 744,CP

Spector SD. *see* Scott, Stowe, & others. 1989;48:213-7\*

Speert PK. *see* Shahian & Speert. 1989;48:275-9\*

Spray TL. *see* Canter, Sekarski, & others. 1989;48:544-50\*

Spray TL. *see* Weinhaus, Canter, & others. 1989;48:206-12\*

Stafford EG. *see* O'Brien, McGiffin, & Stafford. 1989;48:600-9,CV

Stahl E. *see* Johnsson, Messeter, & others. 1989;48:769-75\*

Starnes VA. *see* Dein, Oyer, & others. 1989;48:350-5\*

Starr A, & Grunkemeier GL. The expected lifetime of porcine valves. 1989;48:317-8,ED

Starr A. *see* Floten, Ahmad, & others. 1989;48:757-63\*

Starr A. *see* Grunkemeier & Starr. 1989;48:S14-5\*

Starr A. *see* Swanson & Starr. 1989;48:S51-2\*

Stein P. *see* Magilligan, Lewis, & others. 1989;48:324-30\*

Stellin G, Mazzucco A, Bortolotti U, Faggian G, Livi U, Angelini A, & Gallucci V. Late failure of double-inlet left ventricle septation: treatment by orthotopic heart transplantation. 1989;48:577-8,CR

Stelzer P. *see* Randolph, Toal, & others. 1989;48:345-9\*

Stephan Y. *see* Perier, Deloche, & others. 1989;48:54-9\*

Stewart JR. *see* Frist, Winterland, & others. 1989;48:863-4,CR

Stiegel RM. *see* Hess, Howe, & others. 1989;48:6-9\*

Stinson EB. *see* Dein, Oyer, & others. 1989;48:350-5\*

Stowe CL. *see* Scott, Stowe, & others. 1989;48:213-7\*

Strobl F. *see* Arom, Cohen, & Strobl. 1989;48:476-83\*

Sturm JT, Luxenberg MG, Moudry BM, & Perry JR Jr. Does sternal fracture increase the risk for aortic rupture? 1989; 48:697-8\*

Suarez Nieves AS. *see* Ramirez Schon, Suarez Nieves, & Cebolero Marcucci. 1989;48:356-8\*

Suenaga Y. *see* Tanaka, Abe, & others. 1989;48:857-8,CR

Sugimachi K. *see* Ishida, Oka, & others. 1989;48:90-5\*

Sugimachi K. *see* Mitsudomi, Tateishi, & others. 1989;48:426-7,CR

Sugimachi K. *see* Mitsudomi, Tateishi, & others. 1989;48:639-42\*

Suma H. Coronary artery bypass grafting in patients with calcified ascending aorta: aortic no-touch technique. 1989;48: 728-30,HW

Suma H, Sato H, Fukumoto H, & Takeuchi A. Combined revascularization of coronary and femoral arteries: a proposed alternative. 1989;48:434-6,CR

Suma H. *see* Koike, Suma, & others. 1989;48:853-4,CR

Sundgaard-Riise K. *see* Horowitz, Culpepper, & others. 1989;48: 444-50,CT

Sung C-Y. *see* Huang, Sung, & others. 1989;48:660-4\*

Suzuki A, Ho SY, Anderson RH, & Deanfield JE. Coronary arterial and sinus anatomy in hearts with a common arterial trunk. 1989;48:792-7\*

Swanson JS, & Starr A. The ball valve experience over three decades. 1989;48:S51-2\*

Swanson JS. *see* Floten, Ahmad, & others. 1989;48:757-63\*

Sweeney MS. *see* Gradinac, Coleman, & others. 1989;48:484-9\*

Sweeney MS. *see* Lammermeier, Nakatani, & others. 1989;48: 168-72\*

Symbas PN, Vlasis-Hale SE, Picone AL, & Hatcher CR. Missiles in the heart. 1989;48:192-4\*

Szarnicki RJ. *see* Muehrcke & Szarnicki. 1989;48:706-8,CR

Tachimori Y. *see* Asamura, Kato, & others. 1989;48:423-5,CR

Taegtmeyer H. *see* Gradinac, Coleman, & others. 1989;48:484-9\*

Takami H. *see* Matsuda, Sawa, & others. 1989;48:242-6\*

Takeuchi A. *see* Koike, Suma, & others. 1989;48:853-4,CR

Takeuchi A. *see* Suma, Sato, & others. 1989;48:434-6,CR

Tanaka A. *see* Iwahara, Ino, & others. 1989;48:693-6\*

Tanaka M, Abe T, Hosokawa S, Suenaga Y, Hikosaka H. Tricuspid valve *Candida* endocarditis cured by valve-sparing debridement. 1989;48:857-8,CR

Tanaka S. *see* Masuda, Ogata, & others. 1989;48:376-80\*

Tansmayr G. *see* Müller, Salzer, & others. 1989;48:15-8\*

Tarichko YV. *see* Konstantinov, Ivanov, & others. 1989;48:S77-8\*

Tascon M. Prosthetic heart valves: design considerations. 1989; 48:S16-7\*

Taskinen SO, Salo JA, Halttunen PEA, & Sovijärvi ARA. Tracheobronchial rupture due to blunt chest trauma: a follow-up study. 1989;48:846-9\*

Tateishi M. *see* Ishida, Oka, & others. 1989;48:90-5\*

Tateishi M. *see* Mitsudomi, Tateishi, & others. 1989;48:426-7,CR

Tateishi M. *see* Mitsudomi, Tateishi, & others. 1989;48:639-42\*

Taylor DN. *see* Mitchell, Prabhakar, & others. 1989;48:699-703\*

Teasdale SJ, Zulys VJ, Mycyk T, Baird RJ, & Glynn MFX. Ancrod anticoagulation for cardiopulmonary bypass in heparin-induced thrombocytopenia and thrombosis. 1989;48:712-3,CR

Teijeira FJ, Baril C, & Younge D. Spontaneous hemothorax in a patient with hereditary multiple exostoses. 1989;48:717-8,CR

Ten Kate FJW. *see* Angelini, Witsenburg, & others. 1989;48:714-6,CR

Terranova W, & Crawford FA Jr. Treatment of median sternotomy wound infection and sternal necrosis in an infant. 1989;48:122-3,CR

Thermann M, Bluemm R, Schroeder U, Wassmuth E, & Dohmann R. Efficacy and benefit of mediastinal computed tomography as a selection method for mediastinoscopy. 1989;48:565-7\*

Thieman KC. *see* Coster, Gorton, & others. 1989;48:386-9\*

Thieman KC. *see* Nishida, Grooters, & others. 1989;48:865-6,CR

Thompson JF, & Chant ADB. Autotransfusion of shed mediastinal blood. 1989;48:887-8,CP

Thompson L. *see* Edwards, Schaefer, & others. 1989;48:556-9\*

Thompson LD, Cohen AJ, Edwards FH, & Barry MJ. Coronary artery bypass in idiopathic thrombocytopenia without splenectomy. 1989;48:721-2,CR

Thompson PA. *see* Scott, Stowe, & others. 1989;48:213-7\*

Thurer RJ. *see* Palantianos, Thurer, & others. 1989;48:381-5\*

Thurer RL. *see* Johnson, Thurer, & others. 1989;48:855-6,CR

Toal K. *see* Randolph, Toal, & others. 1989;48:345-9\*

Tobia V. *see* Kopel, Riemersma, & others. 1989;48:228-31\*

Todd TRJ, Goldberg M, Koshal A, Menkis AH, Patterson GA, & Cooper JD. Extraction of cardiopulmonary grafts. Reply. 1989;48:146,CP

Toon RS. Long-term survival after postinfarction bypass operation: early versus late operation. 1989;48:762,DI

Trento A, Griffith BP, Fricker FJ, Kormos RL, Armitage J, & Hardesty RL. Lessons learned in pediatric heart transplantation. 1989;48:617-23\*

Tribble CG. *see* Rodgers & Tribble. 1989;48:743-4,CP

Tsang V, & Goldstraw P. Endobronchial stenting for anastomotic stenosis after sleeve resection. 1989;48:568-71\*

Tsang V, Murday A, Gillbe C, & Goldstraw P. Slide tracheoplasty for congenital funnel-shaped tracheal stenosis. 1989;48:632-5\*

Tukamoto M. *see* Abe, Tukamoto, & others. 1989;48:670-6\*

Tumiati LC. *see* Weisel, Mickle, & others. 1989;48:503-7\*

Tuna IC, & Danielson GK. Use of conduits in surgical repair of congenital heart disease. 1989;48:143-4,CR

Turley K. Lord Brock—the direct approach. 1989;48:736-7,CL

Tyers GFO. FDA recalls: how do pacemaker manufacturers compare? 1989;48:390-6\*

Tyras DH. *see* Weinstein, Rao, & others. 1989;48:72-6\*

Udekwu AO. *see* Pevec, Udekwu, & Peitzman. 1989;48:139-42,CT

Uebis R. *see* Minale, Nikol, & others. 1989;48:235-41\*

Ueda H. *see* Shirakusa, Ueda, & others. 1989;48:779-82\*

Vaccari M. *see* Alajmo, Calamai, & others. 1989;48:536-9\*

Van Buren CT. *see* Lammermeier, Nakatani, & others. 1989;48:168-72\*

Vander Salm TJ. Mitral annular calcification: a new technique for valve replacement. 1989;48:437-9,HW

Vander Salm TJ, Okike ON, Pezzella AT, & Pasque MK. Ectopic ossification after median sternotomy. 1989;48:315-6,CP

Vaneerdeweg W. *see* Van Schil, Vaneerdeweg, & others. 1989;48:889-90,CP

van Lier HJJ. *see* van Son, Daniels, & others. 1989;48:496-502\*

Van Schil P, Vaneerdeweg W, Schoofs E, & Abs R. Retrotracheal mediastinal goiter with contralateral extension. 1989;48:889-90,CP

van Wezel HB. *see* Smulders, Wiepkings, & others. 1989;48:540-3\*

Varma M. *see* Iyer, Varma, & Mee. 1989;48:776-8\*

Vasu MA, Icenogle T, Williams RJ, Sethi GK, & Copeland JG. Management of difficult sternal closure after sternal infection. 1989;48:315,CP

Velanovich V, & Adams CW. Use of colostomy bags for chest tube drainage. Reply. 1989;48:456,CP

Velebit V. *see* Duncan, Frazier, & others. 1989;48:733-5,HW

Verdant A, Page A, & Baillot R. Thromboembolism from undersized Dacron grafts in the descending thoracic aorta. 1989;48:686-8\*

Verginelli G. *see* Pomerantz, Zerbini, & others. 1989;48:S41-4\*

Vesely I. Buckling in bioprosthetic valves. Reply. 1989;48:148,CP

Vigneswaran WT, Campbell DN, Pappas G, Wiggins JW, Wolfe RW, & Clarke DR. Evolution of the management of anomalous left coronary artery: a new surgical approach. 1989;48:560-4\*

Villafana MA. "It will never work!"—the St. Jude valve. 1989;48:S53-4\*

Villani M. Pericardial substitutes. 1989;48:743,CP

Villanueva DT. *see* Antinori, Villanueva, & others. 1989;48:440,HW

Vincent JG. Use of autologous pericardium for ventricular aneurysm closure. 1989;48:146-7,CP

Vincent JG. *see* van Son, Daniels, & others. 1989;48:496-502\*

Vinent-Johansen J. *see* Cheung, Arcidi, & others. 1989;48:331-8\*

Visser CA. *see* Smulders, Wiepkings, & others. 1989;48:540-3\*

Vlasis-Hale SE. *see* Symbas, Vlasis-Hale, & others. 1989;48:192-4\*

von Son JAM, Daniels O, Vincent JG, van Lier HJJ, & Lacquet LK. Appraisal of resection and end-to-end anastomosis for repair of coarctation of the aorta in infancy: preference for resection. 1989;48:496-502\*

Vretakis G. *see* Weinstein, Rao, & others. 1989;48:72-6\*

Wada J, Komatsu S, & Kazui T. Wada-Cutter heart valve: overall experience at the Sapporo Medical College. 1989;48:S38-40\*

Wahi R, McMurtrey MJ, DeCaro LF, Mountain CF, Ali MK, Smith TL, & Roth JA. Determinants of perioperative morbidity and mortality after pneumonectomy. 1989;48:33-7\*

Wakabayashi A. Thoracoscopic ablation of blebs in the treatment of recurrent or persistent spontaneous pneumothorax. 1989;48:651-3\*

Walbaum PR. *see* Walker, Reid, & others. 1989;48:528-35\*

Walker WS, Reid KG, Cameron EWJ, Walbaum PR, & Kitchin AH. Comparison of ventricular septal surgery and mitral valve replacement for hypertrophic obstructive cardiomyopathy. 1989;48:528-35\*

Walker WS. *see* Au, Walker, & others. 1989;48:850-2\*

Wallehaupt SL, & Rogers AT. Intraoperative use of dual-chamber demand pacemakers for open heart operations. 1989;48:579-81,CR

Walls JT. *see* Curtis, Nawarawong, & others. 1989;48:764-8\*

Wallwork J. *see* Smyth, Scott, & others. 1989;48:744,CP

Walsh DS. *see* Seyfer, Walsh, & others. 1989;48:284-6,CR

Wang JH. The design simplicity and clinical elegance of the St. Jude Medical heart valve. 1989;48:S55-6\*

Warden HE. *see* Gustafson, Murray, & others. 1989;48:43-50\*

Wassmuth E. *see* Thermann, Bluemm, & others. 1989;48:565-7\*

Watanabe H. *see* Asamura, Kato, & others. 1989;48:423-5,CR

Watanabe M. *see* Nagaoka, Innami, & others. 1989;48:798-802\*

Watanabe N. *see* Abe, Tukamoto, & others. 1989;48:670-6\*

Watson DC Jr. *see* Hoots & Watson. 1989;48:731-2,HW

Watts DM, Jones GP, Bowman GA, & Olsen JD. Giant benign mesothelioma. 1989;48:590-1,CR

Webb WR. The porcine bioprosthetic heart valve: experience at 15 years. 1989;48:330,DI

Wechsler AS. *see* Mask, Abd-Elfattah, & others. 1989;48:109-12\*

Weinhaus L, Canter C, Noetzel M, McAlister W, & Spray TL. Extracorporeal membrane oxygenation for circulatory support after repair of congenital heart defects. 1989;48:206-12\*

Weinstein GS, & Levin B. Effect of crossover on the statistical power of randomized studies. 1989;48:490-5\*

Weinstein GS, Rao PS, Vretakis G, & Tyras DH. Serial changes in renal function in cardiac surgical patients. 1989;48:72-6\*

Weintraub RM. *see* Johnson, Thurer, & others. 1989;48:855-6,CR

Weisel RD, Mickle DAG, Finkle CD, Tumiati LC, Madonik M, & Ivanov J. Delayed myocardial metabolic recovery after blood cardioplegia. 1989;48:503-7\*

Weiss J. *see* Shafir, Weiss, & others. 1989;48:584-6,CR

Weissberg D. Human immunodeficiency virus. 1989;48:745,CP

Weston LJ. *see* Shapira, Cohen, & others. 1989;48:371-5\*

Wiegking ME. *see* Smulders, Wiegking, & others. 1989;48:540-3\*

Wieting DW. In vitro testing of heart valves: evolution over the past 25 years. 1989;48:S12-13\*

Wiggins JW. *see* Vigneswaran, Campbell, & others. 1989;48:560-4\*

Williams LC III. *see* Horowitz, Culpepper, & others. 1989;48:444-50,CT

Williams MA. The intact bioprosthetic: the first 4 years. 1989;48:S87-8\*

Williams RJ. *see* Vasu, Icenogle, & others. 1989;48:315,CP

Williets T. *see* Page, Russell, & others. 1989;48:514-7\*

Willman VL. *see* Fiore, Naunheim, & others. 1989;48:104-8\*

Wilson GJ. *see* Rebeyka, Wilson, & others. 1989;48:397-403\*

Winchester P. *see* Gold, Pulsinelli, & others. 1989;48:643-5\*

Winniford MD. *see* Lemmer, Winniford, & Ferguson. 1989;48:295-7,CR

Winterland AW. *see* Frist, Winterland, & others. 1989;48:863-4,CR

Wish M. *see* Shapira, Cohen, & others. 1989;48:371-5\*

Witsenburg M. *see* Angelini, Witsenburg, & others. 1989;48:714-6,CR

Wittnich C. *see* Panos, Christakis, & others. 1989;48:816-9\*

Wolfe RW. *see* Vigneswaran, Campbell, & others. 1989;48:560-4\*

Wood JA. *see* Floten, Ahmad, & others. 1989;48:757-63\*

Wren C. *see* McKay, Miyamoto, & others. 1989;48:587-9,CR

Yabuta K. *see* Iwahara, Ino, & others. 1989;48:693-6\*

Yamada M. *see* Braimbridge, Darracott-Cankovic, & others. 1989;48:S67-8\*

Yamane H. *see* Fujiwara, Nogami, & others. 1989;48:518-22\*

Yanagiya M. *see* Abe, Tukamoto, & others. 1989;48:670-6\*

Yano T. *see* Mitsudomi, Tateishi, & others. 1989;48:639-42\*

Yeager AA. *see* Nishida, Grooters, & others. 1989;48:865-6,CR

Yokota M. *see* Sakamoto, Yokota, & others. 1989;48:303-4,HW

Yoshida H. *see* Fujiwara, Nogami, & others. 1989;48:518-22\*

Young JN. Internal banding for truncus arteriosus. Reply. 1989;48:610,CP

Young WP. *see* Gott, Daggett, & Young. 1989;48:S28-30\*

Younge D. *see* Teijeira, Baril, & Younge. 1989;48:717-8,CR

Yu LS. *see* Kolff & Yu. 1989;48:S98-9\*

Zander M. *see* Minale, Nikol, & others. 1989;48:235-41\*

Zeff RH. *see* Phillips, Gay, & others. 1989;48:129,HW

Zenati M, Dowling RD, Armitage JM, Kormos RL, Dummer JS, Hardesty RL, & Griffith BP. Organ procurement for pulmonary transplantation. 1989;48:882-6,CV

Zerbini EJ. *see* Pomerantz, Zerbini, & others. 1989;48:S41-4\*

Zisbrod Z. *see* Acinapura, Rose, & others. 1989;48:186-91\*

Zubiate P. *see* Kay, Morita, & others. 1989;48:S93-5\*

Zulys VJ. *see* Teasdale, Zulys, & others. 1989;48:712-3,CR

Zwischenberger JB, Shalaby TZ, & Conti VR. Viable cryopreserved aortic homograft for aortic valve endocarditis and annular abscesses. 1989;48:365-70\*

# Subject Index

## Volume 48 (July–December 1989)

### KEY TO ABBREVIATIONS USED FOR ARTICLE CLASSIFICATION

\* = Original Article  
AN = Announcement  
CL = Classics in Thoracic Surgery  
CR = Case Report

CP = Correspondence  
CT = Collective Review  
CV = Current Review  
ED = Editorial  
HW = How to Do It

KR = Key References  
PA = Presidential Address  
RE = Report  
RV = Review of Recent Books

#### Abscess

Viable cryopreserved aortic homograft for aortic valve endocarditis and annular abscesses (Zwischenberger, Shalaby, & others) 1989;48:365–70\*

#### Achalasia

Heller's contribution to the surgical treatment of achalasia of the esophagus (Payne) 1989;48:876–81,CL

#### Acidosis, metabolic

Clinical features of aortic arch anomaly with malalignment ventricular septal defect (Iwahara, Ino, & others) 1989;48:693–6\*

#### Adenine nucleotides

Delayed myocardial metabolic recovery after blood cardioplegia (Weisel, Mickle, & others) 1989;48:503–7\*

Embryonic versus adult myocardium: adenine nucleotide degradation during ischemia (Mask, Abd-Elfattah, & others) 1989;48:109–12\*

#### Adhesions

Left thoracotomy approach for coronary artery bypass grafting in patients with pericardial adhesions (Gandjbakhch, Acar, & Cabrol) 1989;48:871–3,HW

New outlook on pericardial substitution after open heart operations (Gabbay, Guindy, & others) 1989;48:803–12\*

#### Adhesive

Tissue adhesive in bronchial closure (Eng & Sabanathan) 1989;48:683–5\*

#### Adrenal cortex

Resection of atricaval adrenal carcinoma using hypothermic circulatory arrest (Shahian, Nieh, & Libertino) 1989;48:421–2,CR

#### Aging

Embryonic versus adult myocardium: adenine nucleotide degradation during ischemia (Mask, Abd-Elfattah, & others) 1989;48:109–12\*

#### Airway obstruction

Endoscopic relief of malignant airway obstruction (Mathisen & Grillo) 1989;48:469–75\*

A technique of airway management in children with obstructed airway due to tumor (Pelton & Ratner) 1989;48:301–2,HW

#### Allografts

Allograft aortic valve implantation: techniques for all types of aortic valve and root pathology (O'Brien, McGiffin, & Stafford) 1989;48:600–9,CV

July issue, pp 1–158; August issue, pp 159–316; September issue; pp 317–462; September supplement, pp S1–106; October issue, pp 463–610; November issue, pp 611–748; December issue, pp 749–928.

Aortic valve and left ventricular outflow tract replacement using allograft and autograft valves: a preliminary report (Randolph, Toal, & others) 1989;48:345–9\*

Freehand homograft aortic valve replacement—the learning curve: a technical analysis of the first 31 patients (Jones) 1989;48:26–32\*

#### Amiodarone

Amiodarone-induced complications after cardiac operation for obstructive hypertrophic cardiomyopathy (Kupferschmid, Rosengart, & others) 1989;48:359–64\*

#### Amrinone

Amrinone versus conventional therapy in pulmonary hypertensive patients awaiting cardiac transplantation (Deeb, Bolling, & others) 1989;48:665–9\*

#### Analgesia

Cryoanalgesia for postthoracotomy pain (Katz) 1989;48:5,ED  
Intraoperative cryoanalgesia for postthoracotomy pain relief (Müller, Salzer, & others) 1989;48:15–8\*

#### Anastomosis

Appraisal of resection and end-to-end anastomosis for repair of coarctation of the aorta in infancy: preference for resection (van Son, Daniels, & others) 1989;48:496–502\*

Complications after esophagogastrectomy using stapling instruments (Muehrcke & Donnelly) 1989;48:257–62\*

Endobronchial stenting for anastomotic stenosis after sleeve resection (Tsang & Goldstraw) 1989;48:568–71\*

Experimental aortocoronary artery bypass grafting using a CO<sub>2</sub> laser on the dog: acute experiment (Nakata, Campbell, & others) 1989;48:628–31\*

Reconstruction of the esophagus with the left colon (Huang, Sung, & others) 1989;48:660–4\*

Tissue adhesive in bronchial closure (Eng & Sabanathan) 1989;48:683–5\*

#### Aneurysms

Ductus diverticulum aneurysm and coronary stenosis: repair using circulatory arrest (Baisden, Sand, & others) 1989;48:432–3,CR

Evolution of surgical treatment of thoracic aortic aneurysms (Cooley) 1989;48:137–8,CL

Impairment in right ventricular performance after left ventricular aneurysm operation (Durand, Bastien, & others) 1989;48:888–9,CP; Reply (Mangschau, Geiran, & others) 1989;48:889,CP

Large animal model of left ventricular aneurysm (Markovitz, Savage, & others) 1989;48:838–45\*

Pseudoaneurysm formation with superior vena caval syndrome 7 years after aortic composite graft placement (McFalls, Palac, & others) 1989;48:704–5,CR

**Aneurysms (cont'd)**

Use of autologous pericardium for ventricular aneurysm closure (Vincent) 1989;48:146,CP  
 Ventricular pseudoaneurysm associated with cardiopulmonary resuscitation 6 weeks after mitral valve replacement (Charson, Gallagher, & others) 1989;48:719-20,CR  
 Visceral and limb perfusion during thoracoabdominal aortic aneurysm repair (Christakis, Panos, & others) 1989;48:592-4,HW

**Angina**

Internal mammary artery bypass grafting: influence on recurrent angina and survival in 2,100 patients (Acinapura, Rose, & others) 1989;48:186-91\*

**Angiography**

Effect of left ventricular septal myectomy on concurrent mitral regurgitation (Cooper, Tucker, & others) 1989;48:251-6\*  
 Value of fiberoptic bronchoscopy and angiography for diagnosis of the bleeding site in hemoptysis (Saumench, Escarabill, & others) 1989;48:272-4\*

**Angioplasty**

Should surgical support within the same institution be required for percutaneous transluminal coronary angioplasty? (Bonchek) 1989;48:159-60,ED

**Annuloplasty**

Adjustable annuloplasty for tricuspid insufficiency (Kurlansky, Rose, & Malm) 1989;48:456-7,CP  
 De Vega's annuloplasty for acquired tricuspid disease: early and late results in 110 patients (Abe, Tukamoto, & others) 1989;48:670-6\*

**Anticoagulation**

Bleeding and anticoagulation (Lambert) 1989;48:454-5,CP

**Aorta**

An anterior longitudinal aortotomy with a distal aortic transection for the arterial switch operation (Sakamoto, Yokota, & others) 1989;48:303-4,HW  
 Aortic graft-valve (composite) replacement at 20 years: wrap or no wrap? Shunt or no shunt? (Kouchoukos) 1989;48:615-6,ED  
 Coronary artery bypass grafting in patients with calcified ascending aorta: aortic no-touch technique (Suma) 1989;48:728-30,HW  
 Does sternal fracture increase the risk for aortic rupture? (Sturm, Luxenberg, & others) 1989;48:697-8\*  
 Fact and fiction about management of aortic transection (Mattox) 1989;48:1-2,ED  
 Intraoperative ultrasonic imaging of the ascending aorta (Marshall, Barzilai, & others) 1989;48:339-44\*  
 Modified Cabrol shunt for control of hemorrhage in repair of type A dissection of the aorta (Blum, Panos, & others) 1989;48:709-11,CR  
 Pseudoaneurysm formation with superior vena caval syndrome 7 years after aortic composite graft placement (McFalls, Palac, & others) 1989;48:704-5,CR  
 Stage I palliation of hypoplastic left heart syndrome: the importance of neoaorta construction (Gustafson, Murray, & others) 1989;48:43-50\*  
 Use of pericardium to control bleeding after ascending aortic graft replacement (Muehrcke & Szarnicki) 1989;48:706-8,CR  
 Viable cryopreserved aortic homograft for aortic valve endocarditis and annular abscesses (Zwischenberger, Shalaby, & others) 1989;48:365-70\*

**Aorta, coarctation of**

Appraisal of resection and end-to-end anastomosis for repair of coarctation of the aorta in infancy: preference for resection (van Son, Daniels, & others) 1989;48:496-502\*

**Aorta, thoracic**

Evolution of surgical treatment of thoracic aortic aneurysms (Cooley), 1989;48:137-8,CL  
 Replacement of the descending thoracic aorta with intraluminal ring graft (Serra, McNicholas, & others) 1989;48:689-92\*  
 Thromboembolism from undersized Dacron grafts in the descending thoracic aorta (Verdant, Page, & Baillot) 1989;48:686-8\*  
 Traumatic tears of the thoracic aorta: improved results using the Bio-Medicus Pump (Hess, Howe, & others) 1989;48:6-9\*

**Aortic aneurysm**

Visceral and limb perfusion during thoracoabdominal aortic aneurysm repair (Christakis, Panos, & others) 1989;48:592-4,HW

**Aortic arch**

Blunt injuries to the aortic arch vessels (Rosenberg, Bredenberg, & others) 1989;48:508-13\*  
 Carotid and aortic arch endarterectomy using hypothermic arrest with coronary bypass (Nishida, Grooters, & others) 1989;48:865-6,CR  
 Clinical features of aortic arch anomaly with malalignment ventricular septal defect (Iwahara, Ino, & others) 1989;48:693-6\*  
 Truncus arteriosus with interrupted aortic arch: successful correction in a neonate (McKay, Miyamoto, & others) 1989;48:587-9,CR

**Aortic stenosis**

Coronary flow velocity waveforms in aortic stenosis and the effects of valve replacement (Fujiwara, Nogami, & others) 1989;48:518-22\*

**Aortic valve**

Allograft aortic valve implantation: techniques for all types of aortic valve and root pathology (O'Brien, McGiffin, & Stafford) 1989;48:600-9,CV  
 Aortic valve and left ventricular outflow tract replacement using allograft and autograft valves: a preliminary report (Randolph, Toal, & others) 1989;48:345-9\*  
 Freehand homograft aortic valve replacement—the learning curve: a technical analysis of the first 31 patients (Jones) 1989;48:26-32\*  
 Modified Danielson technique for recurrent aortic valve endocarditis (Dreyfus, Jebara, & others) 1989;48:725-7,HW  
 Surgical implications of atrial septal defect complicating aortic balloon valvuloplasty (Lemmer, Winniford, & Ferguson) 1989;48:295-7,CR  
 Twenty-five-year review of the Magovern-Cromie sutureless aortic valve (Magovern, Liebler, & others) 1989;48:S33-4\*  
 Viable cryopreserved aortic homograft for aortic valve endocarditis and annular abscesses (Zwischenberger, Shalaby, & others) 1989;48:365-70\*

**Aortocoronary bypass. See Coronary artery bypass.****Aprotinin**

High-dose aprotinin: hemostatic effects in open heart operations (Alajmo, Calamai, & others) 1989;48:536-9\*

**Arrhythmias**  
 Coronary artery bypass grafting in patients with ventricular fibrillation (Kron, Lerman, & others) 1989;48:85-9\*  
 Determinants of perioperative morbidity and mortality after pneumonectomy (Wahi, McMurtrey, & others) 1989;48:33-7\*  
 Prevention of arrhythmias by flecainide after noncardiac thoracic surgery (Borgeat, Biollaz, & others) 1989;48:232-4\*

Transdiaphragmatic implantation of the automatic implantable cardioverter defibrillator (Shapira, Cohen, & others) 1989; 48:371-5\*

Transposition of the great arteries: a comparison of results of the Mustard procedure versus the arterial switch (Backer, Ilbawi, & others) 1989;48:10-4\*

**Arterial switch operation**

An anterior longitudinal aortotomy with a distal aortic transection for the arterial switch operation (Sakamoto, Yokota, & others) 1989;48:303-4,HW

The arterial switch procedure for the neonate: coming of age (Laks) 1989;48:3-4,ED

Transposition of the great arteries: a comparison of results of the Mustard procedure versus the arterial switch (Backer, Ilbawi, & others) 1989;48:10-4\*

**Arteries**

Combined revascularization of coronary and femoral arteries: a proposed alternative (Suma, Sato, & others) 1989;48:434-6,CR

**Arteries, great**

The arterial switch procedure for the neonate: coming of age (Laks) 1989;48:3-4,ED

Transposition of the great arteries: a comparison of results of the Mustard procedure versus the arterial switch (Backer, Ilbawi, & others) 1989;48:10-4\*

**Artificial intelligence**

Use of artificial intelligence for the preoperative diagnosis of pulmonary lesions (Edwards, Schaefer, & others) 1989; 48:556-9\*

**Aspergillus**

Surgical treatment of pulmonary aspergilloma and *Aspergillus* empyema (Shirakusa, Ueda, & others) 1989;48:779-82\*

**Atherosclerosis**

Coronary artery bypass grafting in patients with calcified ascending aorta: aortic no-touch technique (Suma) 1989; 48:728-30,HW

**Atrial septal defect**

Surgical implications of atrial septal defect complicating aortic balloon valvuloplasty (Lemmer, Winniford, & Ferguson) 1989;48:295-7,CR

**Atrioventricular communis**

Pulmonary artery banding: analysis of a 25-year experience (Horowitz, Culpepper, & others) 1989;48:444-50,CT

**Atrioventricular valves**

Coronary arterial and sinusal anatomy in hearts with common arterial trunk (Suzuki, Ho, & others) 1989;48:792-7\*

Intraoperative evaluation of atrioventricular septal defect repair by color flow mapping echocardiography (Canter, Sekarski, & others) 1989;48:544-50\*

**Auscultatory triangle**

Thoracotomy through the auscultatory triangle (Pecora) 1989; 48:748,CP

**Automatic implantable cardioverter defibrillator**

Transdiaphragmatic implantation of the automatic implantable cardioverter defibrillator (Shapira, Cohen, & others) 1989; 48:371-5\*

**Autotransfusion**

Autotransfusion of shed mediastinal blood (Thompson & Chant) 1989;48:887-8,CP; Reply (Griffith) 1989;48:888,CP

**Axillary artery**

Axillary artery insertion of an intraaortic balloon pump (McBride, Miller, & others) 1989;48:874-5,HW

**Azygos vein**

Use of azygos vein as interposition graft for surgical unifocalization of pulmonary blood supply (Iyer, Varma, & Mee) 1989;48:776-8\*

Simplified technique for open placement and removal of intraaortic balloon (Hebeler) 1989;48:134-6,HW

Surgical implications of atrial septal defect complicating aortic balloon valvuloplasty (Lemmer, Winniford, & Ferguson) 1989;48:295-7,CR

**Biopsy**

Biopsy assessment of myocardial protection for valve replacement over the last 24 years (Braimbridge, Darracott-Cankovic, & others) 1989;48:S67-8\*

Chest wall implantation of lung cancer after thin-needle aspiration biopsy (Seyfer, Walsh, & others) 1989;48:284-6,CR

Hazards of transthoracic needle biopsy of the lung (Lillington) 1989;48:163-4,ED

**Björk-Shiley valve**

Thrombectomy of the Björk-Shiley prosthetic valve revisited: long-term results (Montero, Mula, & others) 1989;48: 824-8\*

**Blood flow**

Cerebral blood flow during cardiopulmonary bypass: some new answers to old questions (Reves & Greeley) 1989; 48:752-4,ED

Cerebral vasoreactivity to carbon dioxide during cardiopulmonary perfusion at normothermia and hypothermia (Johnson, Messeter, & others) 1989;48:769-75\*

Coronary flow velocity waveforms in aortic stenosis and the effects of valve replacement (Fujiwara, Nogami, & others) 1989;48:518-22\*

**Blood transfusion**

Blood transfusion and lung cancer recurrence (Keller, Groshen, & others) 1989;48:746,CP; Reply (Piantadosi, Moores, & McKneally) 1989;48:746-7,CP

Simultaneous use of microfibrillar collagen hemostat and blood saving devices in a canine kidney perfusion model (Nebauer, Oz, & others) 1989;48:523-7\*

**Book reviews**

*Anesthesia and the Heart Patient*, edited by Estafanous (Hilberman) 1989;48:828,RV

*Aortic Surgery*, edited by Bergan & Yao (Graham) 1989;48: 730,RV

*Atlas of Pulmonary Resections, Second Edition*, by Burch & Webb (Peters) 1989;48:89,RV

Books received 1989;48:669,RV

*Cardiothoracic Trauma*, by Symbas (Blaisdell) 1989;48:118,RV

*Coronary Angioplasty*, edited by Goldberg (Coffin) 1989;48: 425,RV

*Decision Making in Surgery of the Chest*, edited by Pickard (Peters) 1989;48:250,RV

*Interventional Cardiology*, edited by Holmes & Vlietstra (Peters) 1989;48:669,RV

*Socioeconomics of Surgery*, edited by Rutkow (Roe) 1989;48: 283,RV

*Thoracic Oncology*, edited by Roth, Ruckdeschel, & Weisenburger (Shields) 1989;48:502,RV

**Bridging**

The Pierce-Donachy ventricular assist device as a bridge to cardiac transplantation (Gray, Ganzel, & others) 1989;48: 222-7\*

**Bronchoscopy**

Endobronchial stenting for anastomotic stenosis after sleeve resection (Tsang & Goldstraw) 1989;48:568-71\*

Value of fiberoptic bronchoscopy and angiography for diagnosis of the bleeding site in hemoptysis (Saumench, Escarabill, & others) 1989;48:272-4\*

**Bronchial closure**

Tissue adhesive in bronchial closure (Eng & Sabanathan) 1989;48:683-5\*

**Budd-Chiari syndrome**

Transatrial membranotomy for Budd-Chiari syndrome (Chang, Lee, & others) 1989;48:409-12\*

**Calcification**

Coronary artery bypass grafting in patients with calcified ascending aorta: aortic no-touch technique (Suma) 1989; 48:728-30,HW

Dorsal mass in hyperparathyroidism secondary to chronic renal failure (Mitsudomi, Tateishi, & others) 1989;48:426-7,CR

Mitral annular calcification: a new technique for valve replacement (Vander Salm) 1989;48:437-9,HW

Ultrasonic debridement of calcified pericardium in constrictive pericarditis (Johnson, Thurer, & others) 1989;48:855-6,CR

**Candida albicans**

*Candida* endocarditis with saddle embolism: a successful surgical intervention (Kawamoto, Nakano, & others) 1989; 48:723-4,CR

Tricuspid valve *Candida* endocarditis cured by valve-sparing debridement (Tanaka, Abe, & others) 1989;48:857-8,CR

**Cannula**

Percutaneous venous cannula (Laub) 1989;48:610,CP

**Carbon**

Carbon in prosthetic heart valves (Bokros) 1989;48:S49-50\*

**Carbon dioxide**

Cerebral vasoreactivity to carbon dioxide during cardiopulmonary perfusion at normothermia and hypothermia (Johnson, Messeter, & others) 1989;48:769-75\*

Experimental aortocoronary artery bypass grafting using a CO<sub>2</sub> laser on the dog: acute experiment (Nakata, Campbell, & others) 1989;48:628-31\*

**Carcinoma**

Blood transfusion and lung cancer recurrence (Keller, Groshen, & others) 1989;48:746,CP; Reply (Piantadosi, Moores, & McKneally) 1989;48:746-7,CP

Chest wall implantation of lung cancer after thin-needle aspiration biopsy (Seyfer, Walsh, & others) 1989;48:284-6,CR

Combined gastric pull-up and microvascular jejunal transfer procedure after pharyngolaryngoesophagectomy (Asamura, Kato, & others) 1989;48:423-5,CR

Complications after esophagogastrectomy using stapling instruments (Muehrcke & Donnelly) 1989;48:257-62\*

Efficacy and benefit of mediastinal computed tomography as a selection method for mediastinoscopy (Thermann, Bluemm, & others) 1989;48:565-7\*

Esophageal carcinoma: surgery without preoperative adjuvant chemotherapy (Mansour & Downey) 1989;48:201-5\*

Modified open thoracic rhizotomy for treatment of intractable chest wall pain of malignant etiology (Arbit, Galichich, & others) 1989;48:820-3\*

Neoadjuvant therapy of squamous cell carcinoma of the esophagus: role of resection and benefit in partial responders (Lackey, Reagan, & others) 1989;48:218-21\*

Resection of atriocaval adrenal carcinoma using hypothermic circulatory arrest (Shahian, Nieh, & Libertino) 1989;48: 421-2,CR

Surgical and endoscopic palliation of esophageal carcinoma (Segalini, Little, & others) 1989;48:267-71\*

**Cardiomyopathy**

Amiodarone-induced complications after cardiac operation for obstructive hypertrophic cardiomyopathy (Kupferschmid, Rosengart, & others) 1989;48:359-64\*

Comparison of ventricular septal surgery and mitral valve replacement for hypertrophic obstructive cardiomyopathy (Walker, Reid, & others) 1989;48:528-35\*

**Cardiomyoplasty**

Growth potential of latissimus dorsi muscle flaps used in the cardiomyoplasty procedure (Brady, Dionisopoulos, & others) 1989;48:636-8\*

**Cardioplegia**

Asanguineous reperfusion in a canine model of cardiopulmonary bypass and controlled postischemic work (Rebeyka, Wilson, & others) 1989;48:397-403\*

Delayed myocardial metabolic recovery after blood cardioplegia (Weisel, Mickle, & others) 1989;48:503-7\*

Effects of atrial cardioplegia on the ischemic right ventricle after acute coronary artery occlusion and reperfusion (Diehl, Kaplan, & others) 1989;48:829-34\*

Evaluation of prostacyclin analogue OP-41483 as an adjunct to crystalloid cardioplegia in infants and children (Matsuda, Sawa, & others) 1989;48:242-6\*

Operation for acute postinfarction mitral insufficiency using continuous oxygenated blood cardioplegia (Panos, Christakis, & others) 1989;48:816-9\*

Potassium-induced cardioplegia: evolution and present status (Gay) 1989;48:441-3,CL

Reduction of reperfusion injury with mannitol cardioplegia (Ferreira, Burgos, & others) 1989;48:77-84\*

**Cardiopulmonary bypass**

Ancrod anticoagulation for cardiopulmonary bypass in heparin-induced thrombocytopenia and thrombosis (Teasdale, Zulys, & others) 1989;48:712-3,CR

Asanguineous reperfusion in a canine model of cardiopulmonary bypass and controlled postischemic work (Rebeyka, Wilson, & others) 1989;48:397-403\*

Blunt injuries to the aortic arch vessels (Rosenberg, Bredenberg, & others) 1989;48:508-13\*

Cerebral blood flow during cardiopulmonary bypass: some new answers to old questions (Reves & Greeley) 1989; 48:752-4,ED

Cerebral vasoreactivity to carbon dioxide during cardiopulmonary perfusion at normothermia and hypothermia (Johnson, Messeter, & others) 1989;48:769-75\*

Does hypothermic fibrillatory arrest improve myocardial protection during emergency revascularization? (Greene, Cameron, & others) 1989;48:38-42\*

Ductus diverticulum aneurysm and coronary stenosis: repair using circulatory arrest (Baisden, Sand, & others) 1989;48: 432-3,CR

Effect of intraoperative intervention on neurological outcome based on EEG monitoring during cardiopulmonary bypass (Arom, Cohen, & Strobl) 1989;48:476-83\*

Evolution of the management of anomalous left coronary artery: a new surgical approach (Vigneswaran, Campbell, & others) 1989;48:560-4\*

Extraction of cardiopulmonary grafts (Kirk, Hilton, & Dark) 1989;48:145-6,CP; Reply (Todd, Goldberg, & others) 1989; 48:146,CP

Hypoxemia after intraluminal oxygen line obstruction during cardiopulmonary bypass (Robblee, Crosby, & Keon) 1989; 48:575-6,CR

Incidence of Cell-Saver contamination during cardiopulmonary bypass (Schwieger, Gallagher, & others) 1989;48:51-3\*

New outlook on pericardial substitution after open heart operations (Gabbay, Guindy, & others) 1989;48:803-12\*

Preservation of pancreatic beta cell function with pulsatile cardiopulmonary bypass (Nagaoka, Innami, & others) 1989;48:798-802\*

Serial changes in renal function in cardiac surgical patients (Weinstein, Rao, & others) 1989;48:72-6\*

**Carotid artery**  
Carotid and aortic arch endarterectomy using hypothermic arrest with coronary bypass (Nishida, Grooters, & others) 1989;48:865-6,CR

**Carpentier-Edwards prosthesis**  
A 10-year comparison of mitral valve replacement with Carpentier-Edwards and Hancock porcine bioprostheses (Perier, Deloche, & others) 1989;48:54-9\*

Valve replacement in the right side of the heart in children: long-term follow-up (Fleming, Sarafian, & others) 1989;48:404-8\*

**Case reports**  
Ancrod anticoagulation for cardiopulmonary bypass in heparin-induced thrombocytopenia and thrombosis (Teasdale, Zulys, & others) 1989;48:712-3,CR

Autopsy findings 14 years after septation for single ventricle (Shirakura, Kawashima, & others) 1989;48:124-5,CR

Carotid and aortic arch endarterectomy using hypothermic arrest with coronary bypass (Nishida, Grooters, & others) 1989;48:865-6,CR

Chest wall implantation of lung cancer after thin-needle aspiration biopsy (Seyfer, Walsh, & others) 1989;48:284-6,CR

Combined coronary revascularization and splenectomy (Koike, Suma, & others) 1989;48:853-4,CR

Combined gastric pull-up and microvascular jejunal transfer procedure after pharyngolaryngoesophagectomy (Asamura, Kato, & others) 1989;48:423-5,CR

Combined revascularization of coronary and femoral arteries: a proposed alternative (Suma, Sato, & others) 1989;48:434-6,CR

Controversies in management of sternal tumors (Gabbay, Bennett, & others) 1989;48:428-31,CR

Coronary artery bypass in idiopathic thrombocytopenia without splenectomy (Thompson, Cohen, & others) 1989;48:721-2,CR

Danger in skin grafting the bare mediastinum after sternectomy for postcoronary bypass dehiscence (Shafir, Weiss, & others) 1989;48:584-6,CR

Detection of multiple cardiac papillary fibroelastomas using transesophageal echocardiography (de Virgilio, Dubrow, & others) 1989;48:119-21,CR

Dorsal mass in hyperparathyroidism secondary to chronic renal failure (Mitsudomi, Tateishi, & others) 1989;48:426-7,CR

Ductus diverticulum aneurysm and coronary stenosis: repair using circulatory arrest (Baisden, Sand, & others) 1989;48:432-3,CR

Esophageal rupture complicated by a gastrocardiac fistula: review of the literature and report of a successfully treated case (Finelli, Piasio, & others) 1989;48:582-3,CR

Giant benign mesothelioma (Watts, Jones, & others) 1989;48:590-1,CR

Hypoxemia after intraluminal oxygen line obstruction during cardiopulmonary bypass (Robblee, Crosby, & Keon) 1989;48:575-6,CR

Intraoperative use of dual-chamber demand pacemakers for open heart operations (Wallenhaupt & Rogers) 1989;48:579-81,CR

Laryngotracheoesophageal cleft: endoscopic diagnosis and surgical repair (Chitwood, Bost, & others) 1989;48:292-4,CR

Late failure of double-inlet left ventricle septation: treatment by orthotopic heart transplantation (Stellin, Mazzucco, & others) 1989;48:577-8,CR

Long-term survival after triple-valve replacement (Mulder, Kattus, & Drinkwater) 1989;48:289-91,CR

Malignant melanoma metastatic to the esophagus (Eng, Pradhan, & others) 1989;48:287-8,CR

Modified Cabrol shunt for control of hemorrhage in repair of type A dissection of the aorta (Blum, Panos, & others) 1989;48:709-11,CR

Primary endobronchial granular cell myoblastoma (Lui, McKenzie, & others) 1989;48:113-5,CR

Primary neurilemoma of the diaphragm (McClennan & Okada) 1989;48:126-8,CR

Pseudoaneurysm formation with superior vena caval syndrome 7 years after aortic composite graft placement (McFalls, Palac, & others) 1989;48:704-5,CR

Resection of atricaval adrenal carcinoma using hypothermic circulatory arrest (Shahian, Nieh, & Libertino) 1989;48:421-2,CR

Severe stenotic scar contracture of the Microvel Hemashield right-sided extracardiac conduit (Angelini, Witsenburg, & others) 1989;48:714-6,CR

Solitary plasmacytoma of the sternum: surgical resection with long-term follow-up (Pezzella, Fall, & others) 1989;48:859-62,CR

Spontaneous hemothorax in a patient with hereditary multiple exostoses (Teijeira, Caril, & Younge) 1989;48:717-8,CR

Successful diagnosis and surgical treatment of single ventricle, truncus arteriosus (Shaddy & McGough) 1989;48:298-300,CR

Surgical implications of atrial septal defect complicating aortic balloon valvuloplasty (Lemmer, Winniford, & Ferguson) 1989;48:295-7,CR

Total lymphoid irradiation in heart transplantation: adjunctive treatment for recurrent rejection (Frist, Winterland, & others) 1989;48:863-4,CR

Treatment of median sternotomy wound infection and sternal necrosis in an infant (Terranova & Crawford) 1989;48:122-3,CR

Treatment of postoperative chylothorax with intrapleural fibrin glue (Akaogi, Mitsui, & others) 1989;48:116-8,CR

Tricuspid valve *Candida* endocarditis cured by valve-sparing debridement (Tanaka, Abe, & others) 1989;48:857-8,CR

Truncus arteriosus with interrupted aortic arch: successful correction in a neonate (McKay, Miyamoto, & others) 1989;48:587-9,CR

Ultrasonic debridement of calcified pericardium in constrictive pericarditis (Johnson, Thurer, & others) 1989;48:855-6,CR

Use of pericardium to control bleeding after ascending aortic graft replacement (Muehrcke & Szarnicki) 1989;48:706-8,CR

Ventricular pseudoaneurysm associated with cardiopulmonary resuscitation 6 weeks after mitral valve replacement (Charson, Gallagher, & others) 1989;48:719-20,CR

**Catheters**  
Use of a double-lumen pressure monitoring catheter to facilitate pulmonary artery banding (Phillips, Gay, & others) 1989;48:129,HW

**Cell Saver apparatus**  
Incidence of Cell-Saver contamination during cardiopulmonary bypass (Schwieger, Gallagher, & others) 1989;48:51-3\*

**Chemiluminescence**  
Reduction of reperfusion injury with mannitol cardioplegia (Ferreira, Burgos, & others) 1989;48:77-84\*

**Chemotherapy**  
Esophageal carcinoma: surgery without preoperative adjuvant chemotherapy (Mansour & Downey) 1989;48:201-5\*

**Chemotherapy (cont'd)**

Neoadjuvant therapy of squamous cell carcinoma of the esophagus: role of resection and benefit in partial responders (Lackey, Reagan, & others) 1989;48:218-21\*

**Chest wall**

Chest wall implantation of lung cancer after thin-needle aspiration biopsy (Seyfer, Walsh, & others) 1989;48:284-6,CR

Modified open thoracic rhizotomy for treatment of intractable chest wall pain of malignant etiology (Arbit, Galichich, & others) 1989;48:820-3\*

Treatment of median sternotomy wound infection and sternal necrosis in an infant (Terranova & Crawford) 1989;48:122-3,CR

**Children and infants**

An anterior longitudinal aortotomy with a distal aortic transection for the arterial switch operation (Sakamoto, Yokota, & others) 1989;48:303-4,HW

Appraisal of resection and end-to-end anastomosis for repair of coarctation of the aorta in infancy: preference for resection (van Son, Daniels, & others) 1989;48:496-502\*

The arterial switch procedure for the neonate: coming of age (Laks) 1989;48:3-4,ED

Cryopreserved valve conduits for outflow tract reconstruction in pediatric patients (Clarke) 1989;48:S85-6\*

Evaluation of prostacyclin analogue OP-41483 as an adjunct to crystalloid cardioplegia in infants and children (Matsuda, Sawa, & others) 1989;48:242-6\*

Extracorporeal membrane oxygenation for circulatory support after repair of congenital heart defects (Weinhaus, Canter, & others) 1989;48:206-12\*

Laryngotracheoesophageal cleft: endoscopic diagnosis and surgical repair (Chitwood, Bost, & others) 1989;48:292-4,CR

Late failure of double-inlet left ventricle septation: treatment by orthotopic heart transplantation (Stellin, Mazzucco, & others) 1989;48:577-8,CR

Lessons learned in pediatric heart transplantation (Trento, Griffith, & others) 1989;48:617-23\*

Long-term results after surgical repair of incomplete endocardial cushion defects (Ceithaml, Midgley, & others) 1989;48:413-6\*

Pediatric heart transplantation (Bailey) 1989;48:612,ED

Pleuroperitoneal shunts in the management of persistent chylothorax (Murphy, Newman, & Rodgers) 1989;48:195-200\*

Pulmonary artery banding: analysis of a 25-year experience (Horowitz, Culpepper, & others) 1989;48:444-50,CT

Severe stenotic scar contracture of the Microvel Hemashield right-sided extracardiac conduit (Angelini, Witsenburg, & others) 1989;48:714-6,CR

Slide tracheoplasty for congenital funnel-shaped tracheal stenosis (Tsang, Murday, & others) 1989;48:632-5\*

Spontaneous hemothorax in a patient with hereditary multiple exostoses (Teijeira, Caril, & Younge) 1989;48:717-8,CR

Stage I palliation of hypoplastic left heart syndrome: the importance of neoaorta construction (Gustafson, Murray, & others) 1989;48:43-50\*

Successful diagnosis and surgical treatment of single ventricle, truncus arteriosus (Shaddy & McGough) 1989;48:298-300,CR

Surgical closure of the patent ductus arteriosus in the neonatal intensive care unit (Coster, Gorton, & others) 1989;48:386-9\*

A technique of airway management in children with obstructed airway due to tumor (Pelton & Ratner) 1989;48:301-2,HW

Transposition of the great arteries: a comparison of results of the Mustard procedure versus the arterial switch (Backer, Ilbawi, & others) 1989;48:10-4\*

Treatment of median sternotomy wound infection and sternal necrosis in an infant (Terranova & Crawford) 1989;48:122-3,CR

Truncus arteriosus with interrupted aortic arch: successful correction in a neonate (McKay, Miyamoto, & others) 1989;48:587-9,CR

Valve replacement in the right side of the heart in children: long-term follow-up (Fleming, Sarafian, & others) 1989;48:404-8\*

**Chylothorax**

Pleuroperitoneal shunts in the management of persistent chylothorax (Murphy, Newman, & Rodgers) 1989;48:195-200\*

Treatment of postoperative chylothorax with intrapleural fibrin glue (Akaogi, Mitsui, & others) 1989;48:116-8,CR

**Circulatory support**

Extracorporeal membrane oxygenation for circulatory support after repair of congenital heart defects (Weinhaus, Canter, & others) 1989;48:206-12\*

Implantation techniques for the Hemopump (Duncan, Frazier, & others) 1989;48:733-5,HW

The Pierce-Donachy ventricular assist device as a bridge to cardiac transplantation (Gray, Ganzel, & others) 1989;48:222-7\*

**Classics in thoracic surgery**

Empyema thoracis: historical perspective (Peters) 1989;48:306-8,CL

Evolution of surgical treatment of thoracic aortic aneurysms (Cooley) 1989;48:137-8,CL

Gotthard Bülau and closed water-seal drainage for empyema, 1875-1891 (Meyer) 1989;48:597-9,CL

Heller's contribution to the surgical treatment of achalasia of the esophagus (Payne) 1989;48:876-81,CL

Lord Brock—the direct approach (Turley) 1989;48:736-7,CL

Potassium-induced cardioplegia: evolution and present status (Gay) 1989;48:441-3,CL

**Collagen**

Simultaneous use of microfibrillar collagen hemostat and blood saving devices in a canine kidney perfusion model (Nieberauer, Oz, & others) 1989;48:523-7\*

**Collective reviews**

Blunt rupture of the myocardium (Pevec, Udekuwu, & Peitzman) 1989;48:139-42,CT

Pulmonary artery banding: analysis of a 25-year experience (Horowitz, Culpepper, & others) 1989;48:444-50,CT

**Colon**

Reconstruction of the esophagus with the left colon (Huang, Sung, & others) 1989;48:660-4\*

Replacement of the esophagus by a segment of colon provided with an antireflex valve (Larsson, Lycke, & Radberg) 1989;48:677-82\*

**Colostomy bags**

Use of colostomy bags for chest tube drainage (Kaul, Patwardhan, & Chaukar) 1989;48:456,CP; Reply (Velanovich & Adams) 1989;48:456,CP

**Computed tomography**

Efficacy and benefit of mediastinal computed tomography as a selection method for mediastinoscopy (Thermann, Bluemm, & others) 1989;48:565-7\*

**Computer**

Use of artificial intelligence for the preoperative diagnosis of pulmonary lesions (Edwards, Schaefer, & others) 1989;48:556-9\*

**Conduits**

Construction of an aortic homograft conduit for right ventricle to pulmonary artery continuity (Hoots & Watson) 1989; 48:731-2,HW

Modified Danielson technique for recurrent aortic valve endocarditis (Dreyfus, Jebara, & others) 1989;48:725-7,HW

Severe stenotic scar contracture of the Microvel Hemashield right-sided extracardiac conduit (Angelini, Witsenburg, & others) 1989;48:714-6,CR

Use of conduits in surgical repair of congenital heart disease (Tuna & Danielson) 1989;48:143-4,KR

**Congenital diseases**

Slide tracheoplasty for congenital funnel-shaped tracheal stenosis (Tsang, Murday, & others) 1989;48:632-5\*

**Congenital heart defects**

The arterial switch procedure for the neonate: coming of age (Laks) 1989;48:3-4,ED

Construction of an aortic homograft conduit for right ventricle to pulmonary artery continuity (Hoots & Watson) 1989; 48:731-2,HW

Extracorporeal membrane oxygenation for circulatory support after repair of congenital heart defects (Weinhaus, Canter, & others) 1989;48:206-12\*

Lessons learned in pediatric heart transplantation (Trento, Griffith, & others) 1989;48:617-23\*

Stage I palliation of hypoplastic left heart syndrome: the importance of neoaorta construction (Gustafson, Murray, & others) 1989;48:43-50\*

Use of conduits in surgical repair of congenital heart disease (Tuna & Danielson) 1989;48:143-4,KR

**Contractility**

Pulmonary artery versus left ventricular venting: a radioisotope study of left ventricular function (Mitchell, Prabhakar, & others) 1989;48:699-703\*

**Coronary artery**

Combined coronary revascularization and splenectomy (Koike, Suma, & others) 1989;48:853-4,CR

Combined revascularization of coronary and femoral arteries: a proposed alternative (Suma, Sato, & others) 1989;48:434-6,CR

Coronary arterial and sinusal anatomy in hearts with common arterial trunk (Suzuki, Ho, & others) 1989;48:792-7\*

Effects of atrial cardioplegia on the ischemic right ventricle after acute coronary artery occlusion and reperfusion (Diehl, Kaplan, & others) 1989;48:829-34\*

Evolution of the management of anomalous left coronary artery: a new surgical approach (Vigneswaran, Campbell, & others) 1989;48:560-4\*

**Coronary artery bypass**

Carotid and aortic arch endarterectomy using hypothermic arrest with coronary bypass (Nishida, Grooters, & others) 1989;48:865-6,CR

Controversial aspects of coronary endarterectomy (Minale, Nikol, & others) 1989;48:235-41\*

Coronary artery bypass grafting in patients with ventricular fibrillation (Kron, Lerman, & others) 1989;48:85-9\*

Coronary artery bypass grafting in patients with calcified ascending aorta: aortic no-touch technique (Suma) 1989; 48:728-30,HW

Coronary artery bypass in idiopathic thrombocytopenia without splenectomy (Thompson, Cohen, & others) 1989;48: 721-2,CR

Coronary-subclavian steal after coronary artery bypass grafting using the internal mammary artery (Brouwer) 1989;48: 887,CP; Reply (Olsen) 1989;48:887,CP

Crossovers in coronary artery bypass grafting trials: desirable, undesirable, or both? (Fisher, Kaiser, & others) 1989;48: 465-6,ED

Danger in skin grafting the bare mediastinum after sternectomy for postcoronary bypass dehiscence (Shafir, Weiss, & others) 1989;48:584-6,CR

Delayed myocardial metabolic recovery after blood cardioplegia (Weisel, Mickle, & others) 1989;48:503-7\*

Early bypass operation after acute myocardial infarction (Ochsner) 1989;48:750-1,ED

Experimental aortocoronary artery bypass grafting using a CO<sub>2</sub> laser on the dog: acute experiment (Nakata, Campbell, & others) 1989;48:628-31\*

Factors influencing long-term (10-year to 15-year) survival after a successful coronary artery bypass operation (Johnson, Brenowitz, & Kayser) 1989;48:19-25\*

Improved cardiac function with glucose-insulin-potassium after aortocoronary bypass grafting (Gardinac, Coleman, & others) 1989;48:484-9\*

Internal mammary artery bypass grafting: influence on recurrent angina and survival in 2,100 patients (Acinapura, Rose, & others) 1989;48:186-91\*

Intraoperative use of dual-chamber demand pacemakers for open heart operations (Wallenbaut & Rogers) 1989;48: 579-81,CR

Left thoracotomy approach for coronary artery bypass grafting in patients with pericardial adhesions (Gandjbakhch, Acar, & Cabrol) 1989;48:871-3,HW

Long-term survival after postinfarction bypass operation: early versus late operation (Floten, Ahmad, & others) 1989; 48:757-63\*

New helper instrument in cardiac surgery (Roux, Fournial, & others) 1989;48:595-6,HW

Nonreversed saphenous vein grafts for coronary artery bypass grafting (Molina) 1989;48:624-7\*

Right ventricular function and high-frequency positive-pressure ventilation during coronary artery bypass grafting (Nakatsuka, Colquhoun, & Gehr) 1989;48:263-6\*

Surgical preparation impairs release of endothelium-derived relaxing factor from human saphenous vein (Angelini, Christie, & others) 1989;48:417-20\*

Symptomatic visual deficits after open heart operations (Shahian & Speert) 1989;48:275-9\*

**Correspondence**

Adjustable annuloplasty for tricuspid insufficiency (Kurlansky, Rose, & Malm) 1989;48:456-7,CP

Another method for tunneling defibrillator leads (Smith & Leach) 1989;48:610,CP; Reply (Almassi & Olinger) 1989; 48:610,CP

Autotransfusion of shed mediastinal blood (Thompson & Chant) 1989;48:887-8,CP; Reply (Griffith) 1989;48:888,CP

Bleeding and anticoagulation (Lambert) 1989;48:454-5,CP

Blood transfusion and lung cancer recurrence (Keller, Groshen, & others) 1989;48:746,CP; Reply (Piantadosi, Moores, & McKneally) 1989;48:746-7,CP

Bovine pericardium: another cautionary note (Bullaboy) 1989; 48:743,CP

Buckling in bioprosthetic valves (Fisher & Davies) 1989; 48:147-8,CP; Reply (Vesely & Boughner) 1989;48:148,CP

Can ventricular decompression be optimized? (Lee) 1989;48: 454,CP; Reply (Pennington) 1989;48:454,CP

Coronary-subclavian steal after coronary artery bypass grafting using the internal mammary artery (Brouwer) 1989;48: 887,CP; Reply (Olsen) 1989;48:887,CP

Ectopic ossification after median sternotomy (Vander Salm, Okike, & others) 1989;48:315-6,CP

**Correspondence (cont'd)**

Extraction of cardiopulmonary grafts (Kirk, Hilton, & Dark) 1989;48:145-6,CP; Reply (Todd, Goldberg, & others) 1989;48:146,CP

Heart-lung transplantation for pneumothorax in cystic fibrosis (Smyth, Scott, & others) 1989;48:744-5,CP; Reply (Spector) 1989;48:745,CP

Human immunodeficiency virus (Weissberg) 1989;48:745,CP; Reply (Frater) 1989;48:745-6,CP

Impairment in right ventricular performance after left ventricular aneurysm operation (Durand, Bastien, & others) 1989;48:888-9,CP; Reply (Mangschau, Geiran, & others) 1989;48:889,CP

Internal banding for truncus arteriosus (Parnell) 1989;48:610,CP; Reply (Young) 1989;48:610,CP

Left ventricular rupture (Aris) 1989;48:455,CP; Reply (Berger, Karlson, & Ashraf) 1989;48:455-6,CP

Management of difficult sternal closure after sternal infection (Vasu, Icenogle, & others) 1989;48:315,CP

Myocardial preservation: the role of magnesium (Lonchyna & Lipsius) 1989;48:145,CP; Reply (Keon) 1989;48:145,CP

Percutaneous venous cannula (Laub) 1989;48:610,CP

Pericardial substitutes (Villani) 1989;48:743,CP; Reply (Heydorn, Ferraris, & Berry) 1989;48:743,CP

Pharmacological responses of internal mammary artery grafts (Cheng) 1989;48:747,CP; Reply (Kitamura) 1989;48:747-8,CP

Pneumothorax in cystic fibrosis (Rodgers & Tribble) 1989;48:743-4,CP; Reply (Spector) 1989;48:744,CP

Retrotracheal mediastinal goiter with contralateral extension (Van Schil, Vaneerdeweg, & others) 1989;48:889-90,CP

Right heart endocarditis and endocardial pacemakers (Rubio-Alvarez, Duran-Munoz, & others) 1989;48:147,CP

Thoracotomy through the auscultatory triangle (Pecora) 1989;48:748,CP

Use of autologous pericardium for ventricular aneurysm closure (Vincent) 1989;48:146,CP

Use of colostomy bags for chest tube drainage (Kaul, Patwardhan, & Chaukar) 1989;48:456,CP; Reply (Velanovich & Adams) 1989;48:456,CP

Value of transesophageal echocardiography during open heart operation (Bortolotti, Faggian, & others) 1989;48:456-6,CP

**Coumadin**  
Hematological complications with the St. Jude valve and reduced-dose Coumadin (DiSesa, Collins, & Cohn) 1989;48:280-3\*

**Creatinine clearance**  
Serial changes in renal function in cardiac surgical patients (Weinstein, Rao, & others) 1989;48:72-6\*

**Cricothyroidostomy**  
Percutaneous cricothyroidostomy (minitracheostomy) for bronchial toilet: results of therapeutic and prophylactic use (Au, Walker, & others) 1989;48:850-2\*

**Cross-Jones prosthesis**  
Development of the Cross-Jones caged-lens prosthesis (Cross & Jones) 1989;48:S45-6\*

**Cryoanalgesia**  
Cryoanalgesia for postthoracotomy pain (Katz) 1989;48:5,ED  
Intraoperative cryoanalgesia for postthoracotomy pain relief (Müller, Salzer, & others) 1989;48:15-8\*

**Cryopreservation**  
Cryopreserved valve conduits for outflow tract reconstruction in pediatric patients (Clarke) 1989;48:S85-6\*

Viable cryopreserved aortic homograft for aortic valve endocarditis and annular abscesses (Zwischenberger, Shalaby, & others) 1989;48:365-70\*

**Current reviews**

Allograft aortic valve implantation: techniques for all types of aortic valve and root pathology (O'Brien, McGiffin, & Stafford) 1989;48:600-9,CV

Management of esophageal injuries (Cohn, Hubbard, & Patton) 1989;48:309-14,CV

Organ procurement for pulmonary transplantation (Zenati, Dowling, & others) 1989;48:882-6,CV

**Cyclosporine**  
Cardiac retransplantation in the cyclosporine era (Dein, Oyer, & others) 1989;48:350-5\*

**Cystic fibrosis**  
Heart-lung transplantation for pneumothorax in cystic fibrosis (Smyth, Scott, & others) 1989;48:744-5,CP  
Pneumothorax in cystic fibrosis (Rodgers & Tribble) 1989;48:743-4,CP

**Dacron grafts**  
Thromboembolism from undersized Dacron grafts in the descending thoracic aorta (Verdant, Page, & Baillot) 1989;48:686-8\*

**Data base system**  
It is time for a national cardiothoracic surgical data base (Clark) 1989;48:755-6,ED

**De Vega's procedure**  
De Vega's annuloplasty for acquired tricuspid disease: Early and late results in 110 patients (Abe, Tukamoto, & others) 1989;48:670-6\*

**Debridement**  
Mitral annular calcification: a new technique for valve replacement (Vander Salm) 1989;48:437-9,HW  
Treatment of median sternotomy wound infection and sternal necrosis in an infant (Terranova & Crawford) 1989;48:122-3,CR  
Tricuspid valve *Candida* endocarditis cured by valve-sparing debridement (Tanaka, Abe, & others) 1989;48:857-8,CR  
Ultrasonic debridement of calcified pericardium in constrictive pericarditis (Johnson, Thurer, & others) 1989;48:855-6,CR

**Decompression**  
Can ventricular decompression be optimized? (Lee) 1989;48:454,CP; Reply (Pennington) 1989;48:454,CP

**Defibrillation**  
Another method for tunneling defibrillator leads (Smith & Leach) 1989;48:610,CP; Reply (Almassi & Olinger) 1989;48:610,CP  
Transdiaphragmatic implantation of the automatic implantable cardioverter defibrillator (Shapiro, Cohen, & others) 1989;48:371-5\*

**Diaphragm**  
Primary neurilemoma of the diaphragm (McClenathan & Okada) 1989;48:126-8,CR  
Spontaneous hemothorax in a patient with hereditary multiple exostoses (Teijeira, Caril, & Younge) 1989;48:717-8,CR

**Disc valves**  
Thrombotic obstruction of disc valves: clinical recognition and surgical management (Kontos, Schaff, & others) 1989;48:60-5\*

**Drainage**  
Gotthard Bülow and closed water-seal drainage for empyema, 1875-1891 (Meyer) 1989;48:597-9,CL  
How soon should drainage tubes be removed after cardiac operations? (Smulders, Wiepkink, & others) 1989;48:540-3\*

Use of colostomy bags for chest tube drainage (Kaul, Patwardhan, & Chaukar) 1989;48:456,CP

**Ductus arteriosus**

Ductus diverticulum aneurysm and coronary stenosis: repair using circulatory arrest (Baisden, Sand, & others) 1989; 48:432-3,CR

**Ductus arteriosus, patent**

Surgical closure of the patent ductus arteriosus in the neonatal intensive care unit (Coster, Gorton, & others) 1989;48: 386-9\*

**Echocardiography**

Detection of multiple cardiac papillary fibroelastomas using transesophageal echocardiography (de Virgilio, Dubrow, & others) 1989;48:119-21,CR

How soon should drainage tubes be removed after cardiac operations? (Smulders, Wepking, & others) 1989;48: 540-3\*

Intraoperative evaluation of atrioventricular septal defect repair by color flow mapping echocardiography (Canter, Sekarski, & others) 1989;48:544-50\*

Value of transesophageal echocardiography during open heart operation (Bortolotti, Faggian, & others) 1989;48:456-6,CP

**Editorials**

Aortic graft-valve (composite) replacement at 20 years: wrap or no wrap? Shunt or no shunt? (Kouchoukos) 1989;48: 615-6,ED

Are oxygenators (airplanes, oil spills, pesticides) safe? (Peirce) 1989;48:467-8,ED

The arterial switch procedure for the neonate: coming of age (Laks) 1989;48:3-4,ED

Cerebral blood flow during cardiopulmonary bypass: some new answers to old questions (Reves & Greeley) 1989; 48:752-4,ED

Crossovers in coronary artery bypass grafting trials: desirable, undesirable, or both? (Fisher, Kaiser, & others) 1989;48: 465-6,ED

Cryoanalgesia for postthoracotomy pain (Katz) 1989;48:5,ED

Early bypass operation after acute myocardial infarction (Ochsner) 1989;48:750-1,ED

Evolving techniques in the management of benign esophageal stricture (Duranceau) 1989;48:322-3,ED

The expected lifetime of porcine valves (Starr & Grunkemeier) 1989;48:317-8, ED

Fact and fiction about management of aortic transection (Mattox) 1989;48:1-2,ED

Hazards of transthoracic needle biopsy of the lung (Lillington) 1989;48:163-4,ED

It is time for a national cardiothoracic surgical data base (Clark) 1989;48:755-6,ED

The olden days of surgery for tuberculosis (Newman) 1989; 48:161-2,ED

Pediatric heart transplantation (Bailey) 1989;48:612,ED

Saphenous vein graft valves: "the bad guys" (Mills) 1989; 48:613-4,ED

Should surgical support within the same institution be required for percutaneous transluminal coronary angioplasty? (Bonchek) 1989;48:159-60,ED

Surgical recanalization for treatment of evolving myocardial infarction (Bergmann & Sobel) 1989;48:319-21,ED

Treatment of malignant tracheobronchial obstruction (McElvein) 1989;48:463-4,ED

**Elderly**

Cardiac valve replacement in the elderly: clinical performance of biological prostheses (Jamieson, Burr, & others) 1989; 48:173-85\*

Mitral valve reconstruction in the elderly population (Scott, Stowe, & others) 1989;48:213-7\*

Valve replacement in the octogenarian (Fiore, Naunheim, & others) 1989;48:104-8\*

**Electrocautery**

Thoracoscopic ablation of blebs in the treatment of recurrent or persistent spontaneous pneumothorax (Wakabayashi) 1989;48:651-3\*

**Electroencephalography (EEG)**

Effect of intraoperative intervention on neurological outcome based on EEG monitoring during cardiopulmonary bypass (Arom, Cohen, & Strobl) 1989;48:476-83\*

**Electron microscopy**

The effect of fluorocarbon emulsion on 24-hour canine heart preservation by coronary perfusion (Gohra, Mori, & Esato) 1989;48:96-103\*

Longevity of expanded polytetrafluoroethylene grafts for superior vena cava (Masuda, Ogata, & others) 1989;48: 376-80\*

Reduction of reperfusion injury with mannitol cardioplegia (Ferreira, Burgos, & others) 1989;48:77-84\*

**Embolism, saddle**

Candida endocarditis with saddle embolism: a successful surgical intervention (Kawamoto, Nakano, & others) 1989;48: 723-4,CR

**Embryos**

Embryonic versus adult myocardium: adenine nucleotide degradation during ischemia (Mask, Abd-Elfattah, & others) 1989;48:109-12\*

**Empyema**

Empyema thoracis: Historical perspective (Peters) 1989;48:306-8,CL

Gotthard Bülow and closed water-seal drainage for empyema, 1875-1891 (Meyer) 1989;48:597-9,CL

Surgical treatment of pulmonary aspergilloma and *Aspergillus* empyema (Shirakusa, Ueda, & others) 1989;48:779-82\*

**Endarterectomy**

Carotid and aortic arch endarterectomy using hypothermic arrest with coronary bypass (Nishida, Grooters, & others) 1989;48:865-6,CR

Controversial aspects of coronary endarterectomy (Minale, Nikol, & others) 1989;48:235-41\*

**Endocardial cushion defects**

Long-term results after surgical repair of incomplete endocardial cushion defects (Ceithaml, Midgley, & others) 1989; 48:413-6\*

**Endocarditis**

Candida endocarditis with saddle embolism: a successful surgical intervention (Kawamoto, Nakano, & others) 1989; 48:723-4,CR

Modified Danielson technique for recurrent aortic valve endocarditis (Dreyfus, Jebara, & others) 1989;48:725-7,HW

Right heart endocarditis and endocardial pacemakers (Rubio-Alvarez, Duran-Munoz, & others) 1989;48:147,CP

Tricuspid valve Candida endocarditis cured by valve-sparing debridement (Tanaka, Abe, & others) 1989;48:857-8,CR

Viable cryopreserved aortic homograft for aortic valve endocarditis and annular abscesses (Zwischenberger, Shalaby, & others) 1989;48:365-70\*

**Endoscopy**

Endoscopic relief of malignant airway obstruction (Mathisen & Grillo) 1989;48:469-75\*

Laryngotracheoesophageal cleft: endoscopic diagnosis and surgical repair (Chitwood, Bost, & others) 1989;48:292-4,CR

Surgical and endoscopic palliation of esophageal carcinoma (Segalin, Little, & others) 1989;48:267-71\*

**Endothelium-derived relaxing factor**

Surgical preparation impairs release of endothelium-derived relaxing factor from human saphenous vein (Angelini, Christie, & others) 1989;48:417-20\*

**Esophagus**

Combined gastric pull-up and microvascular jejunal transfer procedure after pharyngolaryngoesophagectomy (Asamura, Kato, & others) 1989;48:423-5,CR

Complications after esophagogastrectomy using stapling instruments (Muehrcke & Donnelly) 1989;48:257-62\*

Esophageal carcinoma: surgery without preoperative adjuvant chemotherapy (Mansour & Downey) 1989;48:201-5\*

Esophageal rupture complicated by a gastrocardiac fistula: review of the literature and report of a successfully treated case (Finelli, Piasio, & others) 1989;48:582-3,CR

Evolving techniques in the management of benign esophageal stricture (Duranceau) 1989;48:322-3,ED

Gastric vascular pedicle patch esophagoplasty for stricture (Ramirez Schon, Suarez Nieves, & Cebollero Marcucci) 1989;48:356-8\*

Heller's contribution to the surgical treatment of achalasia of the esophagus (Payne) 1989;48:876-81,CL

Malignant melanoma metastatic to the esophagus (Eng, Pradhan, & others) 1989;48:287-8,CR

Management of esophageal injuries (Cohn, Hubbard, & Patton) 1989;48:309-14,CV

Neoadjuvant therapy of squamous cell carcinoma of the esophagus: role of resection and benefit in partial responders (Lackey, Reagan, & others) 1989;48:218-21\*

Reconstruction of the esophagus with the left colon (Huang, Sung, & others) 1989;48:660-4\*

Replacement of the esophagus by a segment of colon provided with an antireflex valve (Larsson, Lycke, & Radberg) 1989;48:677-82\*

Surgical and endoscopic palliation of esophageal carcinoma (Segalini, Little, & others) 1989;48:267-71\*

**Evans blue dye**

Evaluation of arterialized vein graft permeability with Evans blue dye and iodine 125-labeled albumin (Finck, Mashburn, & others) 1989;48:646-50\*

**Exostosis**

Spontaneous hemothorax in a patient with hereditary multiple exostoses (Teijeira, Caril, & Younge) 1989;48:717-8,CR

**Extracorporeal membrane oxygenation**

Extracorporeal membrane oxygenation for circulatory support after repair of congenital heart defects (Weinhaus, Canter, & others) 1989;48:206-12\*

**Femoral artery**

Combined revascularization of coronary and femoral arteries: a proposed alternative (Suma, Sato, & others) 1989;48:434-6,CR

Simplified technique for open placement and removal of intraaortic balloon (Hebeler) 1989;48:134-6,HW

**Femorofemoral bypass**

Right thoracotomy, femorofemoral bypass, and deep hypothermia for re-replacement of the mitral valve (Cohn, Peigh, & others) 1989;48:69-71\*

**Fibrin glue**

Treatment of postoperative chylothorax with intrapleural fibrin glue (Akaogi, Mitsui, & others) 1989;48:116-8,CR

**Fibroelastomas**

Detection of multiple cardiac papillary fibroelastomas using transesophageal echocardiography (de Virgilio, Dubrow, & others) 1989;48:119-21,CR

**Flecainide**

Prevention of arrhythmias by flecainide after noncardiac thoracic surgery (Borgeat, Biollaz, & others) 1989;48:232-4\*

**Fluorocarbons**

The effect of fluorocarbon emulsion on 24-hour canine heart preservation by coronary perfusion (Gohra, Mori, & Esato) 1989;48:96-103\*

**Fontan operation**

Prevalence of reoperation for pathway obstruction after Fontan operation (Fernandez, Costa, & others) 1989;48:654-9\*

**Food and Drug Administration (FDA)**

FDA recalls: how do pacemaker manufacturers compare? (Tvers) 1989;48:390-6\*

**Gastrocardiac fistula**

Esophageal rupture complicated by a gastrocardiac fistula: review of the literature and report of a successfully treated case (Finelli, Piasio, & others) 1989;48:582-3,CR

**Gastrotomy**

Complications after esophagogastrectomy using stapling instruments (Muehrcke & Donnelly) 1989;48:257-62\*

**Gentamicin**

Gentamicin solution for mediastinal irrigation: systemic absorption, bactericidal activity, and toxicity (Kopel, Riemersma, & others) 1989;48:228-31\*

**Glucose**

Improved cardiac function with glucose-insulin-potassium after aortocoronary bypass grafting (Gradinac, Coleman, & others) 1989;48:484-9\*

**Goiter**

Retrotracheal mediastinal goiter with contralateral extension (Van Schil, Vaneerdeweg, & others) 1989;48:889-90,CP

**Gore-Tex**

Longevity of expanded polytetrafluoroethylene grafts for superior vena cava (Masuda, Ogata, & others) 1989;48:376-80\*

**Grafts**

Aortic valve and left ventricular outflow tract replacement using allograft and autograft valves: a preliminary report (Randolph, Toal, & others) 1989;48:345-9\*

Coronary artery bypass grafting in patients with ventricular fibrillation (Kron, Lerman, & others) 1989;48:85-9\*

Danger in skin grafting the bare mediastinum after sternectomy for postcoronary bypass dehiscence (Shafir, Weiss, & others) 1989;48:584-6,CR

Evaluation of arterialized vein graft permeability with Evans blue dye and iodine 125-labeled albumin (Finck, Mashburn, & others) 1989;48:646-50\*

Extraction of cardiopulmonary grafts (Kirk, Hilton, & Dark) 1989;48:145-6,CP; Reply (Todd, Goldberg, & others) 1989;48:146,CP

Freehand homograft aortic valve replacement—the learning curve: a technical analysis of the first 31 patients (Jones) 1989;48:26-32\*

Internal mammary artery bypass grafting: influence on recurrent angina and survival in 2,100 patients (Acinapura, Rose, & others) 1989;48:186-91\*

Longevity of expanded polytetrafluoroethylene grafts for superior vena cava (Masuda, Ogata, & others) 1989;48:376-80\*

Nonreversed saphenous vein grafts for coronary artery bypass grafting (Molina) 1989;48:624-7\*

Pharmacological responses of internal mammary artery grafts (Cheng) 1989;48:747,CP; Reply (Kitamura) 1989;48:747-8,CP

Replacement of the descending thoracic aorta with intraluminal ring graft (Serra, McNicholas, & others) 1989;48:689-92\*

Right ventricular function and high-frequency positive-pressure ventilation during coronary artery bypass grafting (Nakatsuka, Colquhoun, & Gehr) 1989;48:263-6\*

Use of azygos vein as interposition graft for surgical unifocalization of pulmonary blood supply (Iyer, Varma, & Mee) 1989;48:776-8\*

Use of pericardium to control bleeding after ascending aortic graft replacement (Muehrcke & Szarnicki) 1989;48:706-8,CR

Viable cryopreserved aortic homograft for aortic valve endocarditis and annular abscesses (Zwischenberger, Shalaby, & others) 1989;48:365-70\*

**Granular cell myoblastoma**

Primary endobronchial granular cell myoblastoma (Lui, McKenzie, & others) 1989;48:113-5,CR

**Hancock prosthesis**

A 10-year comparison of mitral valve replacement with Carpentier-Edwards and Hancock porcine bioprostheses (Perier, Deloche, & others) 1989;48:54-9\*

**Heart**

Cardiac neoplasms (Chitwood) 1989;48:451-3,KR

Delayed myocardial metabolic recovery after blood cardioplegia (Weisel, Mickle, & others) 1989;48:503-7\*

Detection of multiple cardiac papillary fibroelastomas using transesophageal echocardiography (de Virgilio, Dubrow, & others) 1989;48:119-21,CR

Missiles in the heart (Symbas, Vlasis-Hale, & others) 1989;48:192-4\*

The Pierce-Donachy ventricular assist device as a bridge to cardiac transplantation (Gray, Ganzel, & others) 1989;48:222-7\*

Right heart endocarditis and endocardial pacemakers (Rubio-Alvarez, Duran-Munoz, & others) 1989;48:147,CP

**Heart preservation**

The effect of fluorocarbon emulsion on 24-hour canine heart preservation by coronary perfusion (Gohra, Mori, & Esato) 1989;48:96-103\*

**Heart surgery**

Amiodarone-induced complications after cardiac operation for obstructive hypertrophic cardiomyopathy (Kupferschmid, Rosengart, & others) 1989;48:359-64\*

Ancrod anticoagulation for cardiopulmonary bypass in heparin-induced thrombocytopenia and thrombosis (Teasdale, Zulys, & others) 1989;48:712-3,CR

Autopsy findings 14 years after septation for single ventricle (Shirakura, Kawashima, & others) 1989;48:124-5,CR

Cardiac retransplantation in the cyclosporine era (Dein, Oyer, & others) 1989;48:350-5\*

Cardiac valve replacement in the elderly: clinical performance of biological prostheses (Jamieson, Burr, & others) 1989;48:173-85\*

Clinical features of aortic arch anomaly with malalignment ventricular septal defect (Iwahara, Ino, & others) 1989;48:693-6\*

Comparison of ventricular septal surgery and mitral valve replacement for hypertrophic obstructive cardiomyopathy (Walker, Reid, & others) 1989;48:528-35\*

Controversial aspects of coronary endarterectomy (Minale, Nikol, & others) 1989;48:235-41\*

Coronary arterial and sinusal anatomy in hearts with common arterial trunk (Suzuki, Ho, & others) 1989;48:792-7\*

Does hypothermic fibrillatory arrest improve myocardial protection during emergency revascularization? (Greene, Cameron, & others) 1989;48:38-42\*

Ductus diverticulum aneurysm and coronary stenosis: repair using circulatory arrest (Baisden, Sand, & others) 1989;48:432-3,CR

Effect of left ventricular septal myectomy on concurrent mitral regurgitation (Cooper, Tucker, & others) 1989;48:251-6\*

Effect of prior cardiac surgery on survival after heart transplantation (Lammermeier, Nakatani, & others) 1989;48:168-72\*

Elevated hemidiaphragm after cardiac operations: incidence, prognosis, and relationship to the use of topical ice slush (Curtis, Nawarawong, & others) 1989;48:764-8\*

Growth potential of latissimus dorsi muscle flaps used in the cardiomyoplasty procedure (Brady, Dionisopoulos, & others) 1989;48:636-8\*

Hard-shell cardiotomy reservoir for reinfusion of shed mediastinal blood (Page, Russell, & others) 1989;48:514-7\*

Heart/heart-lung transplantation. The domino procedure (Cavarocchi & Badellino) 1989;48:130-3,HW

High-dose aprotinin: hemostatic effects in open heart operations (Alajmo, Calamai, & others) 1989;48:536-9\*

How soon should drainage tubes be removed after cardiac operations? (Smulders, Wiegking, & others) 1989;48:540-3\*

Improved cardiac function with glucose-insulin-potassium after aortocoronary bypass grafting (Gradinac, Coleman, & others) 1989;48:484-9\*

Intraoperative evaluation of atrioventricular septal defect repair by color flow mapping echocardiography (Canter, Sekarski, & others) 1989;48:544-50\*

Intraoperative use of dual-chamber demand pacemakers for open heart operations (Wallenhaupt & Rogers) 1989;48:579-81,CR

It is time for a national cardiothoracic surgical data base (Clark) 1989;48:755-6,ED

Long-term results after surgical repair of incomplete endocardial cushion defects (Ceithaml, Midgley, & others) 1989;48:413-6\*

A method of retraction during reoperative coronary operations using the Favalaro retractor (Antinori, Villanueva, & others) 1989;48:440,HW

New helper instrument in cardiac surgery (Roux, Fournial, & others) 1989;48:595-6,HW

New outlook on pericardial substitution after open heart operations (Gabbay, Guinday, & others) 1989;48:803-12\*

Preservation of pancreatic beta cell function with pulsatile cardiopulmonary bypass (Nagaoka, Innami, & others) 1989;48:798-802\*

Prevalence of reoperation for pathway obstruction after Fontan operation (Fernandez, Costa, & others) 1989;48:654-9\*

Reoperation after pericardial closure with bovine pericardium (Eng, Ravichandran, & others) 1989;48:813-5\*

Reoperative median sternotomy (Garrett & Matthews) 1989;48:305,HW

Safety of metallic surgical clips in patients undergoing high-field-strength magnetic resonance imaging (Gold, Pulsinelli, & others) 1989;48:643-5\*

Serial changes in renal function in cardiac surgical patients (Weinstein, Rao, & others) 1989;48:72-6\*

Symptomatic visual deficits after open heart operations (Shahian & Speert) 1989;48:275-9\*

Value of transesophageal echocardiography during open heart operation (Bortolotti, Faggian, & others) 1989;48:456-6,CP

**Heart surgery (cont'd)**

Valve replacement in the right side of the heart in children: long-term follow-up (Fleming, Sarafian & others) 1989; 48:404-8\*

*See also* Cardiopulmonary bypass; Coronary artery bypass.

**Heart valve replacement, World Congress proceedings**

Actuarial analysis of a uniform and reliable preservation method for viable heart valve allografts (McNally, Barwick, & others) 1989;48:S83-4\*

The ball valve experience over three decades (Swanson & Starr) 1989;48:S51-2\*

Biopsy assessment of myocardial protection for valve replacement over the last 24 years (Braimbridge, Darracott-Cankovic, & others) 1989;48:S67-8\*

Carbon in prosthetic heart valves (Bokros) 1989;48:S49-50\*

Comparative study of heart valve design in the 1960s (Smeloff) 1989;48:S31-2\*

A compression-molded leaflet prosthetic valve (Roe) 1989; 48:S26-27\*

Cryopreserved valve conduits for outflow tract reconstruction in pediatric patients (Clarke) 1989;48:S85-6\*

Design simplicity and clinical elegance of the St. Jude Medical heart valve (Wang) 1989;48:S55-6\*

Development of a carbon-coated, central-hinging, bileaflet valve (Gott, Daggett, & Young) 1989;48:S28-30\*

Development of the Cross-Jones caged-lens prosthesis (Cross & Jones) 1989;48:S45-6\*

The dog as a model for evaluating prosthetic heart valves (Jones, Dreher, & Cross) 1989;48:S4-5\*

Early years in artificial valve development (Kay) 1989;48:S24-25\*

Eighteen-year evolution from the Lillehei-Kaster valve to the Omni design (Mikhail, Ellis, & Johnson) 1989;48:S61-4\*

Elimination of the cloth sewing ring-metal interface in an effort to decrease thromboembolism (Beall) 1989;48:S57-8\*

The flexible monocusp valve: the second and third successful mitral valve replacements (Frater) 1989;48:S96-7\*

From valvular xenograft to valvular bioprosthetic: 1965-1970 (Carpentier) 1989;48:S73-4\*

The full-orifice concept in prosthetic heart valves (Siegel, Davey, & others) 1989;48:S8-9\*

The Hancock modified-orifice porcine bioprosthetic valve: 1976-1988 (Cohn, DiSesa & Collins) 1989;48:S81-2\*

Heart valve legislation and regulation (Pilot) 1989;48:S103-5\*

Heart valves: ten commandments and still counting (Harken) 1989;48:S18-19\*

Heterologous heart valves: past, present, and future (Burman) 1989;48:S75-6\*

Iatrogenic factors in cardiac valve evaluation (Roe) 1989;48: S65-6\*

Implantation techniques: a primary consideration in valve surgery (DeWall & Ellis) 1989;48:S59-60\*

Intact bioprosthetic: the first 4 years (Williams) 1989;48:S87-8\*

"It will never work!"—the St. Jude valve (Villafana) 1989;48: S53-4\*

It will work: the first successful mitral valve replacement (Braunwald) 1989;48:S1-3\*

Medtronic Hall heart valve: background, latest results, and future work (Hall) 1989;48:S47-8\*

Memoirs of an early heart-valve engineer (Siposs) 1989;48: S6-7\*

New cardiac bioprostheses: theory, experiments, and 10 years of clinical use (Konstantinov, Dzemeshkevich, & others) 1989;48:S79-80\*

Origin and development of three new mechanical valve designs: toroidal disc, pivoting disc, and rigid bileaflet cardiac prostheses (Lillehei, Nakib, & others) 1989;48:S35-7\*

Pioneering in heterografts (Binet) 1989;48:S71-2\*

Pitfalls in statistical analysis of heart valve prostheses (Grunkemeier & Starr) 1989;48:S14-15\*

Plastic surgery for cardiac valves: 15 years' experience (Konstantinov, Ivanov, & others) 1989;48:S77-8\*

Prosthetic heart valves: design considerations (Tascon) 1989; 48:S16-17\*

Reduction of ball variance in silicone rubber occluders (Kahn & Carmen) 1989;48:S10-11\*

The return of elastomer valves (Kolff & Yu) 1989;48:S98-9\*

Technical problems in mitral valve repair and replacement (Cooley) 1989;48:S91-2\*

Tricuspid regurgitation associated with mitral valve disease: repair and replacement (Kay, Morita, & others) 1989; 48:S93-5\*

Twenty-five-year review of the Magovern-Cromie sutureless aortic valve (Magovern, Liebler, & others) 1989;48:S33-4\*

Twenty-year comparison of the human allograft and porcine xenograft (Angell, Oury, & others) 1989;48:S89-90\*

Valve replacement in the Heart Institute, University of Sao Paulo, Brazil (Pomerantzeff, Zerbini, & others) 1989;48: S41-4\*

The versatile homograft and autograft valve (Ross) 1989;48: S69-70\*

Vital fluorescent staining of human endothelial cells, fibroblasts, and monocytes: assessment of surface morphology (Crawford, Mildford, & others) 1989;48:S100-2\*

In vitro testing of heart valves: evolution over the past 25 years (Wieting) 1989;48:S12-13\*

Wada-Cutter heart valve: overall experience at the Sapporo Medical College (Wada, Komatsu, & Kazui) 1989;48:S38-40\*

Where is the ideal heart valve substitute? What has frustrated its realization? (Davila) 1989;48:S20-23\*

**Hematology**

Hematological complications with the St. Jude valve and reduced-dose Coumadin (DiSesa, Collins, & Cohn) 1989;48: 280-3\*

**Hemidiaphragm**

Elevated hemidiaphragm after cardiac operations: incidence, prognosis, and relationship to the use of topical ice slush (Curtis, Nawarawong, & others) 1989;48:764-8\*

**Hemodynamics**

Comparison of ventricular septal surgery and mitral valve replacement for hypertrophic obstructive cardiomyopathy (Walker, Reid, & others) 1989;48:528-35\*

Effect of left ventricular septal myectomy on concurrent mitral regurgitation (Cooper, Tucker, & others) 1989;48:251-6\*

Hematological complications with the St. Jude valve and reduced-dose Coumadin (DiSesa, Collins, & Cohn) 1989; 48:280-3\*

Right ventricular function and high-frequency positive-pressure ventilation during coronary artery bypass grafting (Nakatsuka, Colquhoun, & Gehr) 1989;48:263-6\*

Use of azygos vein as interposition graft for surgical unifocalization of pulmonary blood supply (Iyer, Varma, & Mee) 1989;48:776-8\*

**Hemoptysis**

Value of fiberoptic bronchoscopy and angiography for diagnosis of the bleeding site in hemoptysis (Saumench, Escarabill, & others) 1989;48:272-4\*

**Hemopump**

Implantation techniques for the Hemopump (Duncan, Frazier, & others) 1989;48:733-5,HW

**Hemorrhage**

Bleeding and anticoagulation (Lambert) 1989;48:454-5,CP  
Endoscopic relief of malignant airway obstruction (Mathisen & Grillo) 1989;48:469-75\*

Modified Cabrol shunt for control of hemorrhage in repair of type A dissection of the aorta (Blum, Panos, & others) 1989;48:709-11,CR

Pseudoaneurysm formation with superior vena caval syndrome 7 years after aortic composite graft placement (McFalls, Palac, & others) 1989;48:704-5,CR

Use of pericardium to control bleeding after ascending aortic graft replacement (Muehrcke & Szarnicki) 1989;48:706-8,CR

Value of fiberoptic bronchoscopy and angiography for diagnosis of the bleeding site in hemoptysis (Saumench, Escarabill, & others) 1989;48:272-4\*

**Hemostasis**

High-dose aprotinin: hemostatic effects in open heart operations (Alajmo, Calamai, & others) 1989;48:536-9\*

**Hemothorax**

Spontaneous hemothorax in a patient with hereditary multiple exostoses (Teijeira, Caril, & Younge) 1989;48:717-8,CR

**Heparin**

Ancrod anticoagulation for cardiopulmonary bypass in heparin-induced thrombocytopenia and thrombosis (Teasdale, Zulys, & others) 1989;48:712-3,CR

**Histology**

Evaluation of arterialized vein graft permeability with Evans blue dye and iodine 125-labeled albumin (Finck, Mashburn, & others) 1989;48:646-50\*

Experimental aortocoronary artery bypass grafting using a CO<sub>2</sub> laser on the dog: acute experiment (Nakata, Campbell, & others) 1989;48:628-31\*

Inflammatory pseudotumor of the lung in adults: radiographic and clinicopathological analysis (Ishida, Oka, & others) 1989;48:90-5\*

Longer survival after resection of non-small cell lung cancer in Japanese women (Mitsudomi, Tateishi, & others) 1989;48:639-42\*

Vital fluorescent staining of human endothelial cells, fibroblasts, and monocytes: assessment of surface morphology (Crawford, Mildford, & others) 1989;48:S100-2\*

**Historical review**

Transvenous pacing: a seminal transition from the research laboratory (Parsonnet & Bernstein) 1989;48:738-40,CV

**How to do it**

An anterior longitudinal aortotomy with a distal aortic transection for the arterial switch operation (Sakamoto, Yokota, & others) 1989;48:303-4,HW

Axillary artery insertion of an intraaortic balloon pump (McBride, Miller, & others) 1989;48:874-5,HW

Construction of an aortic homograft conduit for right ventricle to pulmonary artery continuity (Hoots & Watson) 1989;48:731-2,HW

Coronary artery bypass grafting in patients with calcified ascending aorta: aortic no-touch technique (Suma) 1989;48:728-30,HW

Heart/heart-lung transplantation. The domino procedure (Cavarocchi & Badellino) 1989;48:130-3,HW

Implantation techniques for the Hemopump (Duncan, Frazier, & others) 1989;48:733-5,HW

Improved visualization of the internal mammary artery with a new retractor system (Pittman, Fehrenbacher, & others) 1989;48:869-70,HW

Left thoracotomy approach for coronary artery bypass grafting in patients with pericardial adhesions (Gandjbakhch, Acar, & Cabrol) 1989;48:871-3,HW

A method of retraction during reoperative coronary operations using the Favalaro retractor (Antinori, Villanueva, & others) 1989;48:440,HW

Mitral annular calcification: a new technique for valve replacement (Vander Salm) 1989;48:437-9,HW

Modified Danielson technique for recurrent aortic valve endocarditis (Dreyfus, Jebara, & others) 1989;48:725-7,HW

New helper instrument in cardiac surgery (Roux, Fournial, & others) 1989;48:595-6,HW

Reoperative median sternotomy (Garrett & Matthews) 1989;48:305,HW

Serratus sling: a simplified serratus-sparing technique (Heitmiller) 1989;48:867-8,HW

Simplified technique for open placement and removal of intraaortic balloon (Hebeler) 1989;48:134-6,HW

A technique of airway management in children with obstructed airway due to tumor (Pelton & Ratner) 1989;48:301-2,HW

Use of a double-lumen pressure monitoring catheter to facilitate pulmonary artery banding (Phillips, Gay, & others) 1989;48:129,HW

Visceral and limb perfusion during thoracoabdominal aortic aneurysm repair (Christakis, Panos, & others) 1989;48:592-4,HW

**Human immunodeficiency virus**

Human immunodeficiency virus (Weissberg) 1989;48:745,CP; Reply (Frater) 1989;48:745-6,CP

**Hyperglycemia**

Preservation of pancreatic beta cell function with pulsatile cardiopulmonary bypass (Nagaoka, Innami, & others) 1989;48:798-802\*

**Hyperparathyroidism**

Dorsal mass in hyperparathyroidism secondary to chronic renal failure (Mitsudomi, Tateishi, & others) 1989;48:426-7,CR

**Hypertension**

Amrinone versus conventional therapy in pulmonary hypertensive patients awaiting cardiac transplantation (Deeb, Bolling, & others) 1989;48:665-9\*

**Hypoplastic left heart syndrome**

Stage I palliation of hypoplastic left heart syndrome: the importance of neoaorta construction (Gustafson, Murray, & others) 1989;48:43-50\*

**Hypothermia**

Carotid and aortic arch endarterectomy using hypothermic arrest with coronary bypass (Nishida, Grooters, & others) 1989;48:865-6,CR

Cerebral vasoreactivity to carbon dioxide during cardiopulmonary perfusion at normothermia and hypothermia (Johnson, Messeter, & others) 1989;48:769-75\*

Does hypothermic fibrillatory arrest improve myocardial protection during emergency revascularization? (Greene, Cameron, & others) 1989;48:38-42\*

The effect of fluorocarbon emulsion on 24-hour canine heart preservation by coronary perfusion (Gohra, Mori, & Esato) 1989;48:96-103\*

Resection of atricaval adrenal carcinoma using hypothermic circulatory arrest (Shahian, Nieh, & Libertino) 1989;48:421-2,CR

**Hypothermia (cont'd)**

Right thoracotomy, femorofemoral bypass, and deep hypothermia for re-replacement of the mitral valve (Cohn, Peigh, & others) 1989;48:69-71\*

Ventricular pseudoaneurysm associated with cardiopulmonary resuscitation 6 weeks after mitral valve replacement (Charson, Gallagher, & others) 1989;48:719-20,CR

**Hypoxemia**

Hypoxemia after intraluminal oxygen line obstruction during cardiopulmonary bypass (Robblee, Crosby, & Keon) 1989; 48:575-6,CR

**Ice slush**

Elevated hemidiaphragm after cardiac operations: incidence, prognosis, and relationship to the use of topical ice slush (Curtis, Nawarawong, & others) 1989;48:764-8\*

**Infants. See Children and infants.****Infection**

Danger in skin grafting the bare mediastinum after sternotomy for postcoronary bypass dehiscence (Shafir, Weiss, & others) 1989;48:584-6,CR

Gentamicin solution for mediastinal irrigation: systemic absorption, bactericidal activity, and toxicity (Kopel, Riemersma, & others) 1989;48:228-31\*

Incidence of Cell-Saver contamination during cardiopulmonary bypass (Schwieger, Gallagher, & others) 1989;48: 51-3\*

Management of difficult sternal closure after sternal infection (Vasu, Icenogle, & others) 1989;48:315,CP

Organ procurement for pulmonary transplantation (Zenati, Dowling, & others) 1989;48:882-6,CV

Treatment of median sternotomy wound infection and sternal necrosis in an infant (Terranova & Crawford) 1989;48:122-3,CR

**Inflammation**

Inflammatory pseudotumor of the lung in adults: radiographic and clinicopathological analysis (Ishida, Oka, & others) 1989;48:90-5\*

**Insulin**

Improved cardiac function with glucose-insulin-potassium after aortocorony bypass grafting (Gradinac, Coleman, & others) 1989;48:484-9\*

Preservation of pancreatic beta cell function with pulsatile cardiopulmonary bypass (Nagaoka, Innami, & others) 1989;48:798-802\*

**Intraaortic balloon pump**

Axillary artery insertion of an intraaortic balloon pump (McBride, Miller, & others) 1989;48:874-5,HW

**Ischemia**

Asanguineous reperfusion in a canine model of cardiopulmonary bypass and controlled postischemic work (Rebeyka, Wilson, & others) 1989;48:397-403\*

Effects of atrial cardioplegia on the ischemic right ventricle after acute coronary artery occlusion and reperfusion (Diehl, Kaplan, & others) 1989;48:829-34\*

Embryonic versus adult myocardium: adenine nucleotide degradation during ischemia (Mask, Abd-Elfattah, & others) 1989;48:109-12\*

Large animal model of left ventricular aneurysm (Markovitz, Savage, & others) 1989;48:838-45\*

Reperfusion of infarcting myocardium: benefit of surgical reperfusion in a chronic model (Cheung, Arcidi, & others) 1989;48:331-8\*

Symptomatic visual deficits after open heart operations (Shahian & Speert) 1989;48:275-9\*

**Jejunum**

Combined gastric pull-up and microvascular jejunal transfer procedure after pharyngolaryngoesophagectomy (Asamura, Kato, & others) 1989;48:423-5,CR

**Key references**

Cardiac neoplasms (Chitwood) 1989;48:451-3,KR  
Lung transplantation (Egan & Cooper) 1989;48:741-2,KR  
Use of conduits in surgical repair of congenital heart disease (Tuna & Danielson) 1989;48:143-4,KR

**Kidney**

Dorsal mass in hyperparathyroidism secondary to chronic renal failure (Mitsudomi, Tateishi, & others) 1989;48:426-7,CR

Serial changes in renal function in cardiac surgical patients (Weinstein, Rao, & others) 1989;48:72-6\*

Simultaneous use of microfibrillar collagen hemostat and blood saving devices in a canine kidney perfusion model (Nieberauer, Oz, & others) 1989;48:523-7\*

**Laryngotracheoesophageal cleft**

Laryngotracheoesophageal cleft: endoscopic diagnosis and surgical repair (Chitwood, Bost, & others) 1989;48:292-4,CR

**Laser therapy**

Experimental aortocorony artery bypass grafting using a CO<sub>2</sub> laser on the dog: acute experiment (Nakata, Campbell, & others) 1989;48:628-31\*

Surgical and endoscopic palliation of esophageal carcinoma (Segalin, Little, & others) 1989;48:267-71\*

**Lillehei-Kaster valve**

Eighteen-year evolution from the Lillehei-Kaster valve to the Omni design (Mikhail, Ellis, & Johnson) 1989;48:S61-4\*

**Lung**

Empyema thoracis: historical perspective (Peters) 1989;48:306-8,CL

Inflammatory pseudotumor of the lung in adults: radiographic and clinicopathological analysis (Ishida, Oka, & others) 1989;48:90-5\*

Use of artificial intelligence for the preoperative diagnosis of pulmonary lesions (Edwards, Schaefer, & others) 1989; 48:556-9\*

**Lung cancer**

Blood transfusion and lung cancer recurrence (Keller, Groshen, & others) 1989;48:746,CP; Reply (Piantadosi, Moores, & McKneally) 1989;48:746-7,CP

Chest wall implantation of lung cancer after thin-needle aspiration biopsy (Seyfer, Walsh, & others) 1989;48:284-6,CR

Endobronchial stenting for anastomotic stenosis after sleeve resection (Tsang & Goldstraw) 1989;48:568-71\*

Longer survival after resection of non-small cell lung cancer in Japanese women (Mitsudomi, Tateishi, & others) 1989; 48:639-42\*

Treatment of postoperative chylothorax with intrapleural fibrin glue (Akaogi, Mitsui, & others) 1989;48:116-8,CR

**Lung surgery**

Chest wall implantation of lung cancer after thin-needle aspiration biopsy (Seyfer, Walsh, & others) 1989;48:284-6,CR

Hazards of transthoracic needle biopsy of the lung (Lillington) 1989;48:163-4,ED

The olden days of surgery for tuberculosis (Newman) 1989; 48:161-2,ED

Surgical resection for complications of pulmonary tuberculosis (Reed, Parker, & Crawford) 1989;48:165-7\*

Tissue adhesive in bronchial closure (Eng & Sabanathan) 1989;48:683-5\*

**Lymph nodes**

Mediastinal lymph node necrosis: a newly recognized complication of mediastinoscopy (Miller & Nelems) 1989;48:247-50\*

Total lymphoid irradiation in heart transplantation: adjunctive treatment for recurrent rejection (Frist, Winterland, & others) 1989;48:863-4,CR

**Magnesium**

Myocardial preservation: the role of magnesium (Lonchyna & Lipsius) 1989;48:145,CP; Reply (Keon) 1989;48:145,CP

**Magnetic resonance imaging**

Safety of metallic surgical clips in patients undergoing high-field-strength magnetic resonance imaging (Gold, Pulsinelli, & others) 1989;48:643-5\*

**Magovern-Cromie valve**

Twenty-five-year review of the Magovern-Cromie sutureless aortic valve (Magovern, Liebler, & others) 1989;48:S33-4\*

**Mammary artery**

Coronary-subclavian steal after coronary artery bypass grafting using the internal mammary artery (Brouwer) 1989;48:887,CP; Reply (Olsen) 1989;48:887,CP

Factors influencing long-term (10-year to 15-year) survival after a successful coronary artery bypass operation (Johnson, Brenowitz, & Kayser) 1989;48:19-25\*

Improved visualization of the internal mammary artery with a new retractor system (Pittman, Fehrenbacher, & others) 1989;48:869-70,HW

Internal mammary artery bypass grafting: influence on recurrent angina and survival in 2,100 patients (Acinapura, Rose, & others) 1989;48:186-91\*

Pharmacological responses of internal mammary artery grafts (Cheng) 1989;48:747,CP; Reply (Kitamura) 1989;48:747-8,CP

**Mannitol**

Hypoxemia after intraluminal oxygen line obstruction during cardiopulmonary bypass (Robblee, Crosby, & Keon) 1989;48:575-6,CR

Reduction of reperfusion injury with mannitol cardioplegia (Ferreira, Burgos, & others) 1989;48:77-84\*

**Mediastinum**

Autotransfusion of shed mediastinal blood (Thompson & Chant) 1989;48:887-8,CP; Reply (Griffith) 1989;48:888,CP

Danger in skin grafting the bare mediastinum after sternectomy for postcoronary bypass dehiscence (Shafir, Weiss, & others) 1989;48:584-6,CR

Efficacy and benefit of mediastinal computed tomography as a selection method for mediastinoscopy (Thermann, Bluemm, & others) 1989;48:565-7\*

Gentamicin solution for mediastinal irrigation: systemic absorption, bactericidal activity, and toxicity (Kopel, Riemersma, & others) 1989;48:228-31\*

Hard-shell cardiotomy reservoir for reinfusion of shed mediastinal blood (Page, Russell, & others) 1989;48:514-7\*

Mediastinal lymph node necrosis: a newly recognized complication of mediastinoscopy (Miller & Nelems) 1989;48:247-50\*

A technique of airway management in children with obstructed airway due to tumor (Pelton & Ratner) 1989;48:301-2,HW

**Medtronic Hall heart valve**

Medtronic Hall heart valve: background, latest results, and future work (Hall) 1989;48:S47-8\*

**Melanoma**

Malignant melanoma metastatic to the esophagus (Eng, Pradhan, & others) 1989;48:287-8,CR

**Mesothelioma**

Giant benign mesothelioma (Watts, Jones, & others) 1989;48:590-1,CR

**Mitral valve**

Comparison of ventricular septal surgery and mitral valve replacement for hypertrophic obstructive cardiomyopathy (Walker, Reid, & others) 1989;48:528-35\*

Effect of left ventricular septal myectomy on concurrent mitral regurgitation (Cooper, Tucker, & others) 1989;48:251-6\*

The flexible monocusp valve: the second and third successful mitral valve replacements (Frater) 1989;48:S96-7\*

It will work: the first successful mitral valve replacement (Braunwald) 1989;48:S1-3\*

Mitral annular calcification: a new technique for valve replacement (Vander Salm) 1989;48:437-9,HW

Mitral valve reconstruction in the elderly population (Scott, Stowe, & others) 1989;48:213-7\*

Right thoracotomy, femorofemoral bypass, and deep hypothermia for re-replacement of the mitral valve (Cohn, Peigh, & others) 1989;48:69-71\*

Simplified method for reoperation on the mitral valve (Praeger, Pooley, & others) 1989;48:835-7\*

Technical problems in mitral valve repair and replacement (Cooley) 1989;48:S91-2\*

A 10-year comparison of mitral valve replacement with Carpentier-Edwards and Hancock porcine bioprostheses (Perier, Deloche, & others) 1989;48:54-9\*

Tricuspid regurgitation associated with mitral valve disease: repair and replacement (Kay, Morita, & others) 1989;48:S93-5\*

Ventricular pseudoaneurysm associated with cardiopulmonary resuscitation 6 weeks after mitral valve replacement (Charson, Gallagher, & others) 1989;48:719-20,CR

**Monomeric n-butyl-2-cyanoacrylate**

Tissue adhesive in bronchial closure (Eng & Sabanathan) 1989;48:683-5\*

**Morbidity**

Determinants of perioperative morbidity and mortality after pneumonectomy (Wahi, McMurtrey, & others) 1989;48:33-7\*

Mitral valve reconstruction in the elderly population (Scott, Stowe, & others) 1989;48:213-7\*

**Mortality rates**

Cardiac valve replacement in the elderly: clinical performance of biological prostheses (Jamieson, Burr, & others) 1989;48:173-85\*

Controversial aspects of coronary endarterectomy (Minale, Nikol, & others) 1989;48:235-41\*

Determinants of perioperative morbidity and mortality after pneumonectomy (Wahi, McMurtrey & others) 1989;48:33-7\*

Long-term survival after postinfarction bypass operation: early versus late operation (Floten, Ahmad, & others) 1989;48:757-63\*

Surgical and endoscopic palliation of esophageal carcinoma (Segalin, Little, & others) 1989;48:267-71\*

Transposition of the great arteries: a comparison of results of the Mustard procedure versus the arterial switch (Backer, Ilbawi, & others) 1989;48:10-4\*

Valve replacement in the octogenarian (Fiore, Naunheim, & others) 1989;48:104-8\*

**Muscles**

Growth potential of latissimus dorsi muscle flaps used in the cardiomyoplasty procedure (Brady, Dionisopoulos, & others) 1989;48:636-8\*

**Muscles (cont'd)**  
 Serratus sling: a simplified serratus-sparing technique (Heitmiller) 1989;48:867-8,HW

**Mustard operation**  
 Transposition of the great arteries: a comparison of results of the Mustard procedure versus the arterial switch (Backer, Ilbawi, & others) 1989;48:10-4\*

**Myasthenia gravis**  
 Thymectomy for myasthenia gravis: recent observations and comparisons with past experience (Mulder, Graves, & Herrmann) 1989;48:551-5\*

**Myectomy (Morrow procedure)**  
 Effect of left ventricular septal myectomy on concurrent mitral regurgitation (Cooper, Tucker, & others) 1989;48:251-6\*

**Myoblastoma**  
 Primary endobronchial granular cell myoblastoma (Lui, McKenzie, & others) 1989;48:113-5,CR

**Myocardial infarction**  
 Early bypass operation after acute myocardial infarction (Ochsner) 1989;48:750-1,ED  
 Large animal model of left ventricular aneurysm (Markovitz, Savage, & others) 1989;48:838-45\*  
 Long-term survival after postinfarction bypass operation: early versus late operation (Floten, Ahmad, & others) 1989;48:757-63\*  
 Operation for acute postinfarction mitral insufficiency using continuous oxygenated blood cardioplegia (Panos, Christakis, & others) 1989;48:816-9\*  
 Reperfusion of infarcting myocardium: benefit of surgical reperfusion in a chronic model (Cheung, Arcidi, & others) 1989;48:331-8\*  
 Surgical recanalization for treatment of evolving myocardial infarction (Bergmann & Sobel) 1989;48:319-21,ED

**Myocardial preservation**  
 Elevated hemidiaphragm after cardiac operations: incidence, prognosis, and relationship to the use of topical ice slush (Curtis, Nawarawong, & others) 1989;48:764-8\*

**Myocardium**  
 Blunt rupture of the myocardium (Pevec, Udekwu, & Peitzman) 1989;48:139-42,CT  
 Does hypothermic fibrillatory arrest improve myocardial protection during emergency revascularization? (Greene, Cameron, & others) 1989;48:38-42\*  
 Embryonic versus adult myocardium: adenine nucleotide degradation during ischemia (Mask, Abd-Elfattah, & others) 1989;48:109-12\*  
 Myocardial preservation: the role of magnesium (Lonchyna & Lipsius) 1989;48:145,CP; Reply (Keon) 1989;48:145,CP

**National Implant Registry**  
 Heart valves: ten commandments and still counting (Harken) 1989;48:S18-19\*

**Necrosis**  
 Mediastinal lymph node necrosis: a newly recognized complication of mediastinoscopy (Miller & Nelems) 1989;48:247-50\*

**Needle biopsy**  
 Chest wall implantation of lung cancer after thin-needle aspiration biopsy (Seyfer, Walsh, & others) 1989;48:284-6,CR  
 Hazards of transthoracic needle biopsy of the lung (Lillington) 1989;48:163-4,ED

**Neoplasms**  
 A technique of airway management in children with obstructed airway due to tumor (Pelton & Ratner) 1989;48:301-2,HW

Cardiac neoplasms (Chitwood) 1989;48:451-3,KR  
 Controversies in management of sternal tumors (Gabbay, Bennett, & others) 1989;48:428-31,CR

**Neurilemoma**  
 Primary neurilemoma of the diaphragm (McClenathan & Okada) 1989;48:126-8,CR

**Neurological deficits**  
 Effect of intraoperative intervention on neurological outcome based on EEG monitoring during cardiopulmonary bypass (Arom, Cohen, & Strobl) 1989;48:476-83\*

**Occipital infarction**  
 Symptomatic visual deficits after open heart operations (Shahian & Speert) 1989;48:275-9\*

**Omni valve**  
 Eighteen-year evolution from the Lillehei-Kaster valve to the Omni design (Mikhail, Ellis, & Johnson) 1989;48:S61-4\*

**OP-41483**  
 Evaluation of prostacyclin analogue OP-41483 as an adjunct to crystalloid cardioplegia in infants and children (Matsuda, Sawa, & others) 1989;48:242-6\*

**Organ donors**  
 Organ procurement for pulmonary transplantation (Zenati, Dowling, & others) 1989;48:882-6,CV

**Oxygenation**  
 Are oxygenators (airplanes, oil spills, pesticides) safe? (Peirce) 1989;48:467-8,ED  
 The effect of fluorocarbon emulsion on 24-hour canine heart preservation by coronary perfusion (Gohra, Mori, & Esato) 1989;48:96-103\*  
 Extracorporeal membrane oxygenation for circulatory support after repair of congenital heart defects (Weinhaus, Canter, & others) 1989;48:206-12\*  
 Hypoxemia after intraluminal oxygen line obstruction during cardiopulmonary bypass (Robblee, Crosby, & Keon) 1989;48:575-6,CR  
 Operation for acute postinfarction mitral insufficiency using continuous oxygenated blood cardioplegia (Panos, Christakis, & others) 1989;48:816-9\*

**Pacemakers**  
 FDA recalls: how do pacemaker manufacturers compare? (Tvers) 1989;48:390-6\*

Intraoperative use of dual-chamber demand pacemakers for open heart operations (Wallenhaupt & Rogers) 1989;48:579-81,CR

Right heart endocarditis and endocardial pacemakers (Rubio-Alvarez, Duran-Munoz, & others) 1989;48:147,CP

**Pain**  
 Cryoanalgesia for postthoracotomy pain (Katz) 1989;48:5,ED  
 Intraoperative cryoanalgesia for postthoracotomy pain relief (Müller, Salzer, & others) 1989;48:15-8\*

Modified open thoracic rhizotomy for treatment of intractable chest wall pain of malignant etiology (Arbit, Galicich, & others) 1989;48:820-3\*

**Pancreas**  
 Preservation of pancreatic beta cell function with pulsatile cardiopulmonary bypass (Nagaoka, Innami, & others) 1989;48:798-802\*

**Papillary fibroelastomas**  
 Detection of multiple cardiac papillary fibroelastomas using transesophageal echocardiography (de Virgilio, Dubrow, & others) 1989;48:119-21,CR

**Paraplegia**

Replacement of the descending thoracic aorta with intraluminal ring graft (Serra, McNicholas, & others) 1989;48:689-92\*

**Percutaneous transluminal coronary angioplasty**

Should surgical support within the same institution be required for percutaneous transluminal coronary angioplasty? (Bonchek) 1989;48:159-60,ED

**Perfusion**

Visceral and limb perfusion during thoracoabdominal aortic aneurysm repair (Christakis, Panos, & others) 1989;48:592-4,HW

**Pericardium**

Bovine pericardium: another cautionary note (Bullaboy) 1989;48:743,CP

Clinical experience with subxiphoid drainage of pericardial effusions (Palatianos, Thurer, & others) 1989;48:381-5\*

How soon should drainage tubes be removed after cardiac operations? (Smulders, Wepking, & others) 1989;48:540-3\*

New outlook on pericardial substitution after open heart operations (Gabbay, Guindy, & others) 1989;48:803-12\*

Pericardial substitutes (Villani) 1989;48:743,CP; Reply (Heydorn, Ferraris, & Berry) 1989;48:743,CP

Reoperation after pericardial closure with bovine pericardium (Eng, Ravichandran, & others) 1989;48:813-5\*

Ultrasonic debridement of calcified pericardium in constrictive pericarditis (Johnson, Thurer, & others) 1989;48:855-6,CR

Use of autologous pericardium for ventricular aneurysm closure (Vincent) 1989;48:146,CP

Use of pericardium to control bleeding after ascending aortic graft replacement (Muehrcke & Szarnicki) 1989;48:706-8,CR

**Phosphates, high-energy**

Embryonic versus adult myocardium: adenine nucleotide degradation during ischemia (Mask, Abd-Elfattah, & others) 1989;48:109-12\*

**Pierce-Donachy ventricular assist device**

The Pierce-Donachy ventricular assist device as a bridge to cardiac transplantation (Gray, Ganzel, & others) 1989;48:222-7\*

**Plasmacytoma**

Controversies in management of sternal tumors (Gabbay, Bennett, & others) 1989;48:428-31,CR

Solitary plasmacytoma of the sternum: surgical resection with long-term follow-up (Pezzella, Fall, & others) 1989;48:859-62,CR

**Pleuropertitoneal shunts**

Pleuropertitoneal shunts in the management of persistent chylothorax (Murphy, Newman, & Rodgers) 1989;48:195-200\*

**Pneumonectomy**

Determinants of perioperative morbidity and mortality after pneumonectomy (Wahi, McMurtrey, & others) 1989;48:33-7\*

**Pneumothorax**

Heart-lung transplantation for pneumothorax in cystic fibrosis (Smyth, Scott, & others) 1989;48:744-5,CP; Reply (Spector) 1989;48:745,CP

Pneumothorax in cystic fibrosis (Rodgers & Tribble) 1989;48:743-4,CP; Reply (Spector) 1989;48:744,CP

Thoracoscopic ablation of blebs in the treatment of recurrent or persistent spontaneous pneumothorax (Wakabayashi) 1989;48:651-3\*

**Polytetrafluoroethylene**

Longevity of expanded polytetrafluoroethylene grafts for superior vena cava (Masuda, Ogata, & others) 1989;48:376-80\*

**Potassium**

Improved cardiac function with glucose-insulin-potassium after aortocoronary bypass grafting (Gradinac, Coleman, & others) 1989;48:484-9\*

Potassium-induced cardioplegia: evolution and present status (Gay) 1989;48:441-3,CL

**President's Page**

STS Presidential message to membership (Rainer) 1989;48:749,ED

**Pressure monitoring**

Use of a double-lumen pressure monitoring catheter to facilitate pulmonary artery banding (Phillips, Gay, & others) 1989;48:129,HW

**Prostacyclin**

Evaluation of prostacyclin analogue OP-41483 as an adjunct to crystalloid cardioplegia in infants and children (Matsuda, Sawa, & others) 1989;48:242-6\*

**Prostheses**

Buckling in bioprosthetic valves (Fisher & Davies) 1989;48:147-8,CP; Reply (Vesely & Boughner) 1989;48:148,CP

Cardiac valve replacement in the elderly: clinical performance of biological prostheses (Jamieson, Burr, & others) 1989;48:173-85\*

Hematological complications with the St. Jude valve and reduced-dose Coumadin (DiSesa, Collins, & Cohn) 1989;48:280-3\*

The porcine bioprosthetic heart valve: experience at 15 years (Magilligan, Lewis, & others) 1989;48:324-30\*

Severe stenotic scar contracture of the Microvel Hemashield right-sided extracardiac conduit (Angelini, Witsenburg, & others) 1989;48:714-6,CR

A 10-year comparison of mitral valve replacement with Carpentier-Edwards and Hancock porcine bioprostheses (Perier, Deloche, & others) 1989;48:54-9\*

Thrombectomy of the Björk-Shiley prosthetic valve revisited: long-term results (Montero, Mula, & others) 1989;48:824-8\*

Thrombotic obstruction of disc valves: clinical recognition and surgical management (Kontos, Schaff, & others) 1989;48:60-5\*

*See also* Heart valve replacement, World Congress proceedings.

**Pseudotumors**

Inflammatory pseudotumor of the lung in adults: radiographic and clinicopathological analysis (Ishida, Oka, & others) 1989;48:90-5\*

**Pulmonary artery**

Construction of an aortic homograft conduit for right ventricle to pulmonary artery continuity (Hoots & Watson) 1989;48:731-2,HW

Evolution of the management of anomalous left coronary artery: a new surgical approach (Vigneswaran, Campbell, & others) 1989;48:560-4\*

Prevalence of reoperation for pathway obstruction after Fontan operation (Fernandez, Costa, & others) 1989;48:654-9\*

Pulmonary artery banding: analysis of a 25-year experience (Horowitz, Culpepper, & others) 1989;48:444-50,CT

Pulmonary artery versus left ventricular venting: a radioisotope study of left ventricular function (Mitchell, Prabhakar, & others) 1989;48:699-703\*

**Pulmonary artery (cont'd)**

Use of a double-lumen pressure monitoring catheter to facilitate pulmonary artery banding (Phillips, Gay, & others) 1989;48:129,HW

**Pulmonary function**

Surgical resection for complications of pulmonary tuberculosis (Reed, Parker, & Crawford), 1989;48:165-7\*

Tracheobronchial rupture due to blunt chest trauma: a follow-up study (Taskinen, Salo, & others) 1989;48:846-9\*

**Pulmonary stenosis**

Effect of transannular patching on outcome after repair of tetralogy of Fallot (Kirklin, Kirklin, & others) 1989;48:783-9\*

Right ventricular pressure dynamics after operation for pulmonary stenosis (Milo, Mohr, & Goor) 1989;48:572-4\*

**Pumps**

Axillary artery insertion of an intraaortic balloon pump (McBride, Miller, & others) 1989;48:874-5,HW

Implantation techniques for the Hemopump (Duncan, Frazier, & others) 1989;48:733-5,HW

Traumatic tears of the thoracic aorta: improved results using the Bio-Medicus Pump (Hess, Howe, & others) 1989;48:6-9\*

**Radiation therapy**

Neoadjuvant therapy of squamous cell carcinoma of the esophagus: Role of resection and benefit in partial responders (Lackey, Reagan, & others) 1989;48:218-21\*

**Radiography**

Blunt injuries to the aortic arch vessels (Rosenberg, Bredenberg, & others) 1989;48:508-13\*

Inflammatory pseudotumor of the lung in adults: radiographic and clinicopathological analysis (Ishida, Oka, & others) 1989;48:90-5\*

**Radionuclide scan**

Pulmonary artery versus left ventricular venting: a radioisotope study of left ventricular function (Mitchell, Prabhakar, & others) 1989;48:699-703\*

**Rejection**

Cardiac retransplantation in the cyclosporine era (Dein, Oyer, & others) 1989;48:350-5\*

**Reperfusion**

Asanguineous reperfusion in a canine model of cardiopulmonary bypass and controlled postischemic work (Rebeyka, Wilson, & others) 1989;48:397-403\*

Reperfusion of infarcting myocardium: benefit of surgical reperfusion in a chronic model (Cheung, Arcidi, & others) 1989;48:331-8\*

Surgical recanalization for treatment of evolving myocardial infarction (Bergmann & Sobel) 1989;48:319-21,ED

**Respiration**

Right ventricular function and high-frequency positive-pressure ventilation during coronary artery bypass grafting (Nakatsuka, Colquhoun, & Gehr) 1989;48:263-6\*

**Retraction**

Improved visualization of the internal mammary artery with a new retractor system (Pittman, Fehrenbacher, & others) 1989;48:869-70,HW

A method of retraction during reoperative coronary operations using the Favaloro retractor (Antinori, Villanueva, & others) 1989;48:440,HW

**Revascularization**

Combined revascularization of coronary and femoral arteries: a proposed alternative (Suma, Sato, & others) 1989;48:434-6,CR

Controversial aspects of coronary endarterectomy (Minale, Nikol, & others) 1989;48:235-41\*

Coronary artery bypass grafting in patients with ventricular fibrillation (Kron, Lerman, & others) 1989;48:85-9\*

Does hypothermic fibrillatory arrest improve myocardial protection during emergency revascularization? (Greene, Cameron, & others) 1989;48:38-42\*

Reduction of reperfusion injury with mannitol cardioplegia (Ferreira, Burgos, & others) 1989;48:77-84\*

**Rhizotomy**

Modified open thoracic rhizotomy for treatment of intractable chest wall pain of malignant etiology (Arbit, Galichich, & others) 1989;48:820-3\*

**Risk factors**

Determinants of perioperative morbidity and mortality after pneumonectomy (Wahi, McMurtrey, & others) 1989;48:33-7\*

Factors influencing long-term (10-year to 15-year) survival after a successful coronary artery bypass operation (Johnson, Brenowitz, & Kayser) 1989;48:19-25\*

Internal mammary artery bypass grafting: influence on recurrent angina and survival in 2,100 patients (Acinapura, Rose, & others) 1989;48:186-91\*

The porcine bioprosthetic heart valve: experience at 15 years (Magilligan, Lewis, & others) 1989;48:324-30\*

**Saphenous vein**

Evaluation of arterialized vein graft permeability with Evans blue dye and iodine 125-labeled albumin (Finck, Mashburn, & others) 1989;48:646-50\*

Nonreversed saphenous vein grafts for coronary artery bypass grafting (Molina) 1989;48:624-7\*

Saphenous vein graft valves: "the bad guys" (Mills) 1989;48:613-4,ED

Surgical preparation impairs release of endothelium-derived relaxing factor from human saphenous vein (Angelini, Christie, & others) 1989;48:417-20\*

**Serratus**

Serratus sling: a simplified serratus-sparing technique (Heitmiller) 1989;48:867-8,HW

**Sex hormones**

Longer survival after resection of non-small cell lung cancer in Japanese women (Mitsudomi, Tateishi, & others) 1989;48:639-42\*

**Shunts**

Aortic graft-valve (composite) replacement at 20 years: wrap or no wrap? Shunt or no shunt? (Kouchoukos) 1989;48:615-6,ED

Modified Cabrol shunt for control of hemorrhage in repair of type A dissection of the aorta (Blum, Panos, & others) 1989;48:709-11,CR

Pleuroperitoneal shunts in the management of persistent chylothorax (Murphy, Newman, & Rodgers) 1989;48:195-200\*

**Smoking**

Longer survival after resection of non-small cell lung cancer in Japanese women (Mitsudomi, Tateishi, & others) 1989;48:639-42\*

**The Society of Thoracic Surgeons**

Twenty-fifth anniversary meeting program, 1989;48:149-58

**Spleen**

Combined coronary revascularization and splenectomy (Koike, Suma, & others) 1989;48:853-4,CR

Coronary artery bypass in idiopathic thrombocytopenia without splenectomy (Thompson, Cohen, & others) 1989;48:721-2,CR

**Sputum**

Percutaneous cricothyroidostomy (minitracheostomy) for bronchial toilet: results of therapeutic and prophylactic use (Au, Walker, & others) 1989;48:850-2\*

**Squamous cell carcinoma**

Neoadjuvant therapy of squamous cell carcinoma of the esophagus: Role of resection and benefit in partial responders (Lackey, Reagan, & others) 1989;48:218-21\*

**St. Jude valve**

Design simplicity and clinical elegance of the St. Jude Medical heart valve (Wang) 1989;48:555-6\*

Hematological complications with the St. Jude valve and reduced-dose Coumadin (DiSesa, Collins, & Cohn) 1989;48:280-3\*

"It will never work!"—the St. Jude valve (Villafana) 1989;48:S53-4\*

**Staplers**

Complications after esophagogastrectomy using stapling instruments (Muehrcke & Donnelly) 1989;48:257-62\*

**Statistics**

Effect of crossover on the statistical power of randomized studies (Weinstein & Levin) 1989;48:490-5\*

Pitfalls in statistical analysis of heart valve prostheses (Grunkemeier & Starr) 1989;48:S14-15\*

**Stenosis**

Coronary flow velocity waveforms in aortic stenosis and the effects of valve replacement (Fujiwara, Nogami, & others) 1989;48:518-22\*

Ductus diverticulum aneurysm and coronary stenosis: repair using circulatory arrest (Baisden, Sand, & others) 1989;48:432-3,CR

Effect of left ventricular septal myectomy on concurrent mitral regurgitation (Cooper, Tucker, & others) 1989;48:251-6\*

Effect of transannular patching on outcome after repair of tetralogy of Fallot (Kirklin, Kirklin, & others) 1989;48:783-9\*

Endobronchial stenting for anastomotic stenosis after sleeve resection (Tsang & Goldstraw) 1989;48:568-71\*

Long-term survival after triple-valve replacement (Mulder, Kattus, & Drinkwater) 1989;48:289-91,CR

Right ventricular pressure dynamics after operation for pulmonary stenosis (Milo, Mohr, & Goor) 1989;48:572-4\*

Severe stenotic scar contracture of the Microvel Hemashield right-sided extracardiac conduit (Angelini, Witsenburg, & others) 1989;48:714-6,CR

Slide tracheoplasty for congenital funnel-shaped tracheal stenosis (Tsang, Murday, & others) 1989;48:632-5\*

Surgical implications of atrial septal defect complicating aortic balloon valvuloplasty (Lemmer, Winniford, & Ferguson) 1989;48:295-7,CR

**Stents**

Endobronchial stenting for anastomotic stenosis after sleeve resection (Tsang & Goldstraw) 1989;48:568-71\*

**Sternotomy**

Ectopic ossification after median sternotomy (Vander Salm, Okike, & others) 1989;48:315-6,CP

Reoperation after pericardial closure with bovine pericardium (Eng, Ravichandran, & others) 1989;48:813-5\*

Reoperative median sternotomy (Garrett & Matthews) 1989;48:305,HW

**Sternum**

Controversies in management of sternal tumors (Gabbay, Bennett, & others) 1989;48:428-31,CR

Does sternal fracture increase the risk for aortic rupture?

(Sturm, Luxenberg, & others) 1989;48:697-8\*

Improved visualization of the internal mammary artery with a new retractor system (Pittman, Fehrenbacher, & others) 1989;48:869-70,HW

Management of difficult sternal closure after sternal infection (Vasu, Icenogle, & others) 1989;48:315,CP

Solitary plasmacytoma of the sternum: surgical resection with long-term follow-up (Pezzella, Fall, & others) 1989;48:859-62,CR

**Stomach**

Combined gastric pull-up and microvascular jejunal transfer procedure after pharyngolaryngoesophagectomy (Asamura, Kato, & others) 1989;48:423-5,CR

Gastric vascular pedicle patch esophagoplasty for stricture (Ramirez Schon, Suarez Nieves, & Cebollero Marcucci) 1989;48:356-8\*

**Stroke**

Intraoperative ultrasonic imaging of the ascending aorta (Marshall, Barzilai, & others) 1989;48:339-44\*

**Subclavian steal**

Coronary-subclavian steal after coronary artery bypass grafting using the internal mammary artery (Brouwer) 1989;48:887,CP; Reply (Olsen) 1989;48:887,CP

**Subxiphoid drainage**

Clinical experience with subxiphoid drainage of pericardial effusions (Palatianos, Thurer, & others) 1989;48:381-5\*

**Surgical techniques**

An anterior longitudinal aortotomy with a distal aortic transection for the arterial switch operation (Sakamoto, Yokota, & others) 1989;48:303-4,HW

Aortic valve and left ventricular outflow tract replacement using allograft and autograft valves: a preliminary report (Randolph, Toal, & others) 1989;48:345-9\*

Appraisal of resection and end-to-end anastomosis for repair of coarctation of the aorta in infancy: preference for resection (van Son, Daniels, & others) 1989;48:496-502\*

Combined gastric pull-up and microvascular jejunal transfer procedure after pharyngolaryngoesophagectomy (Asamura, Kato, & others) 1989;48:423-5,CR

Comparison of ventricular septal surgery and mitral valve replacement for hypertrophic obstructive cardiomyopathy (Walker, Reid, & others) 1989;48:528-35\*

Controversies in management of sternal tumors (Gabbay, Bennett, & others) 1989;48:428-31,CR

Endobronchial stenting for anastomotic stenosis after sleeve resection (Tsang & Goldstraw) 1989;48:568-71\*

Evolution of the management of anomalous left coronary artery: a new surgical approach (Vigneswaran, Campbell, & others) 1989;48:560-4\*

Freehand homograft aortic valve replacement—the learning curve: a technical analysis of the first 31 patients (Jones) 1989;48:26-32\*

Gastric vascular pedicle patch esophagoplasty for stricture (Ramirez Schon, Suarez Nieves, & Cebollero Marcucci) 1989;48:356-8\*

Heart/heart-lung transplantation. The domino procedure (Cavarocchi & Badellino) 1989;48:130-3,HW

Laryngotracheoesophageal cleft: endoscopic diagnosis and surgical repair (Chitwood, Bost, & others) 1989;48:292-4,CR

Operation for acute postinfarction mitral insufficiency using continuous oxygenated blood cardioplegia (Panos, Christakis, & others) 1989;48:816-9\*

**Surgical techniques (cont'd)**

Pleuroperitoneal shunts in the management of persistent chylothorax (Murphy, Newman, & Rodgers) 1989;48:195-200\*

Reconstruction of the esophagus with the left colon (Huang, Sung, & others) 1989;48:660-4\*

Replacement of the descending thoracic aorta with intraluminal ring graft (Serra, McNicholas, & others) 1989;48:689-92\*

Replacement of the esophagus by a segment of colon provided with an antireflex valve (Larsson, Lycke, & Radberg) 1989;48:677-82\*

Simplified method for reoperation on the mitral valve (Praeger, Pooley, & others) 1989;48:835-7\*

Simplified technique for open placement and removal of intraaortic balloon (Hebeler) 1989;48:134-6,HW

Stage I palliation of hypoplastic left heart syndrome: The importance of neoaorta construction (Gustafson, Murray, & others) 1989;48:43-50\*

Surgical closure of the patent ductus arteriosus in the neonatal intensive care unit (Coster, Gorton, & others) 1989;48:386-9\*

Transdiaphragmatic implantation of the automatic implantable cardioverter defibrillator (Shapira, Cohen, & others) 1989;48:371-5\*

Transposition of the great arteries: a comparison of results of the Mustard procedure versus the arterial switch (Backer, Ilbawi, & others) 1989;48:10-4\*

Use of conduits in surgical repair of congenital heart disease (Tuna & Danielson) 1989;48:143-4,CR

**Survival rates**

Cardiac retransplantation in the cyclosporine era (Dein, Oyer, & others) 1989;48:350-5\*

De Vega's annuloplasty for acquired tricuspid disease: early and late results in 110 patients (Abe, Tukamoto, & others) 1989;48:670-6\*

Effect of prior cardiac surgery on survival after heart transplantation (Lammermeier, Nakatani, & others) 1989;48:168-72\*

Endoscopic relief of malignant airway obstruction (Mathisen & Grillo) 1989;48:469-75\*

Esophageal carcinoma: surgery without preoperative adjuvant chemotherapy (Mansour & Downey) 1989;48:201-5\*

Factors influencing long-term (10-year to 15-year) survival after a successful coronary artery bypass operation (Johnson, Brenowitz, & Kayser) 1989;48:19-25\*

Internal mammary artery bypass grafting: influence on recurrent angina and survival in 2,100 patients (Acinapura, Rose, & others) 1989;48:186-91\*

Intraoperative evaluation of atrioventricular septal defect repair by color flow mapping echocardiography (Canter, Sekarski, & others) 1989;48:544-50\*

Lessons learned in pediatric heart transplantation (Trento, Griffith, & others) 1989;48:617-23\*

Long-term survival after postinfarction bypass operation: early versus late operation (Floten, Ahmad, & others) 1989;48:757-63\*

Long-term survival after triple-valve replacement (Mulder, Kattus, & Drinkwater) 1989;48:289-91,CR

Longer survival after resection of non-small cell lung cancer in Japanese women (Mitsudomi, Tateishi, & others) 1989;48:639-42\*

The porcine bioprosthetic heart valve: experience at 15 years (Magilligan, Lewis, & others) 1989;48:324-30\*

Surgical and endoscopic palliation of esophageal carcinoma (Segalin, Little, & others) 1989;48:267-71\*

**Temperature**

Cerebral vasoreactivity to carbon dioxide during cardiopulmonary perfusion at normothermia and hypothermia (Johnson, Messeter, & others) 1989;48:769-75\*

**Tetralogy of Fallot**

Effect of transannular patching on outcome after repair of tetralogy of Fallot (Kirklin, Kirklin, & others) 1989;48:783-9\*

**Thoracic surgery**

Hard-shell cardiopulmonary reservoir for reinfusion of shed mediastinal blood (Page, Russell, & others) 1989;48:514-7\*

It is time for a national cardiothoracic surgical data base (Clark) 1989;48:755-6,ED

Modified open thoracic rhizotomy for treatment of intractable chest wall pain of malignant etiology (Arbit, Galichich, & others) 1989;48:820-3\*

Percutaneous cricothyroidostomy (minitracheostomy) for bronchial toilet: results of therapeutic and prophylactic use (Au, Walker, & others) 1989;48:850-2\*

Prevention of arrhythmias by flecainide after noncardiac thoracic surgery (Borgeat, Biollaz, & others) 1989;48:232-4\*

Reconstruction of the esophagus with the left colon (Huang, Sung, & others) 1989;48:660-4\*

Thymectomy for myasthenia gravis: recent observations and comparisons with past experience (Mulder, Graves, & Herrmann) 1989;48:551-5\*

Visceral and limb perfusion during thoracoabdominal aortic aneurysm repair (Christakis, Panos, & others) 1989;48:592-4,HW

**Thoracoscopy**

Thoracoscopic ablation of blebs in the treatment of recurrent or persistent spontaneous pneumothorax (Wakabayashi) 1989;48:651-3\*

Thoracoscopy: a review of 121 consecutive surgical procedures (Page, Jeffrey, & others) 1989;48:66-8\*

**Thoracotomy**

Cryoanalgesia for postthoracotomy pain (Katz) 1989;48:5,ED

Efficacy and benefit of mediastinal computed tomography as a selection method for mediastinoscopy (Thermann, Bluemm, & others) 1989;48:565-7\*

Intraoperative cryoanalgesia for postthoracotomy pain relief (Müller, Salzer, & others) 1989;48:15-8\*

Left thoracotomy approach for coronary artery bypass grafting in patients with pericardial adhesions (Gandjbakhch, Acar, & Cabrol) 1989;48:871-3,HW

Mediastinal lymph node necrosis: a newly recognized complication of mediastinoscopy (Miller & Nelems) 1989;48:247-50\*

Right thoracotomy, femorofemoral bypass, and deep hypothermia for re-replacement of the mitral valve (Cohn, Peigh, & others) 1989;48:69-71\*

Serratus sling: a simplified serratus-sparing technique (Heitmiller) 1989;48:867-8,HW

Simplified method for reoperation on the mitral valve (Praeger, Pooley, & others) 1989;48:835-7\*

Thoracotomy through the auscultatory triangle (Pecora) 1989;48:748,CP

**Thrombocytopenia**

Ancrod anticoagulation for cardiopulmonary bypass in heparin-induced thrombocytopenia and thrombosis (Teasdale, Zulys, & others) 1989;48:712-3,CR

Combined coronary revascularization and splenectomy (Koike, Suma, & others) 1989;48:853-4,CR

Coronary artery bypass in idiopathic thrombocytopenia without splenectomy (Thompson, Cohen, & others) 1989;48:721-2,CR

**Thromboembolism**

Elimination of the cloth sewing ring-metal interface in an effort to decrease thromboembolism (Beall) 1989;48:S57-8\*

The porcine bioprosthetic heart valve: experience at 15 years (Magilligan, Lewis, & others) 1989;48:324-30\*

Thromboembolism from undersized Dacron grafts in the descending thoracic aorta (Verdant, Page, & Baillot) 1989;48:686-8\*

**Thrombosis**

Thrombectomy of the Björk-Shiley prosthetic valve revisited: long-term results (Montero, Mula, & others) 1989;48:824-8\*

Thrombotic obstruction of disc valves: clinical recognition and surgical management (Kontos, Schaff, & others) 1989;48:60-5\*

**Thymectomy**

Thymectomy for myasthenia gravis: recent observations and comparisons with past experience (Mulder, Graves, & Herrmann) 1989;48:551-5\*

**Tracheobronchial tree**

Primary endobronchial granular cell myoblastoma (Lui, McKenzie, & others) 1989;48:113-5,CR

Tracheobronchial rupture due to blunt chest trauma: a follow-up study (Taskinen, Salo, & others) 1989;48:846-9\*

Treatment of malignant tracheobronchial obstruction (McElvein) 1989;48:463-4,ED

**Tracheoplasty**

Slide tracheoplasty for congenital funnel-shaped tracheal stenosis (Tsang, Murday, & others) 1989;48:632-5\*

**Tracheostomy**

Percutaneous cricothyroidostomy (minitracheostomy) for bronchial toilet: results of therapeutic and prophylactic use (Au, Walker, & others) 1989;48:850-2\*

**Transannular patching**

Effect of transannular patching on outcome after repair of tetralogy of Fallot (Kirklin, Kirklin, & others) 1989;48:783-9\*

**Transplantation, heart**

Amrinone versus conventional therapy in pulmonary hypertensive patients awaiting cardiac transplantation (Deeb, Bolling, & others) 1989;48:665-9\*

Cardiac retransplantation in the cyclosporine era (Dein, Oyer, & others) 1989;48:350-5\*

Effect of prior cardiac surgery on survival after heart transplantation (Lammermeier, Nakatani, & others) 1989;48:168-72\*

Heart/heart-lung transplantation. The domino procedure (Cavarocchi & Badellino) 1989;48:130-3,HW

Late failure of double-inlet left ventricle septation: treatment by orthotopic heart transplantation (Stellin, Mazzucco, & others) 1989;48:577-8,CR

Lessons learned in pediatric heart transplantation (Trento, Griffith, & others) 1989;48:617-23\*

Pediatric heart transplantation (Bailey) 1989;48:612,ED

The Pierce-Donachy ventricular assist device as a bridge to cardiac transplantation (Gray, Ganzel, & others) 1989;48:222-7\*

Total lymphoid irradiation in heart transplantation: adjunctive treatment for recurrent rejection (Frist, Winterland, & others) 1989;48:863-4,CR

**Transplantation, heart-lung**

Heart/heart-lung transplantation. The domino procedure (Cavarocchi & Badellino) 1989;48:130-3,HW

Heart-lung transplantation for pneumothorax in cystic fibrosis (Smyth, Scott, & others) 1989;48:744-5,CP; Reply (Spector) 1989;48:745,CP

**Transplantation, lung**

Lung transplantation (Egan & Cooper) 1989;48:741-2,KR

Organ procurement for pulmonary transplantation (Zenati, Dowling, & others) 1989;48:882-6,CV

**Trauma**

Blunt injuries to the aortic arch vessels (Rosenberg, Bredenberg, & others) 1989;48:508-13\*

Blunt rupture of the myocardium (Pevec, Udekuwu, & Peitzman) 1989;48:139-42,CT

Does sternal fracture increase the risk for aortia rupture? (Sturm, Luxenberg, & others) 1989;48:697-8\*

Management of esophageal injuries (Cohn, Hubbard, & Patton) 1989;48:309-14,CV

Missiles in the heart (Symbas, Vlasis-Hale, & others) 1989;48:192-4\*

Tracheobronchial rupture due to blunt chest trauma: a follow-up study (Taskinen, Salo, & others) 1989;48:846-9\*

Traumatic tears of the thoracic aorta: improved results using the Bio-Medicus Pump (Hess, Howe, & others) 1989;48:6-9\*

Ventricular pseudoaneurysm associated with cardiopulmonary resuscitation 6 weeks after mitral valve replacement (Charson, Gallagher, & others) 1989;48:719-20,CR

**Tricuspid valve**

Adjustable annuloplasty for tricuspid insufficiency (Kurlansky, Rose, & Malm) 1989;48:456-7,CP

De Vega's annuloplasty for acquired tricuspid disease: early and late results in 110 patients (Abe, Tukamoto, & others) 1989;48:670-6\*

Tricuspid regurgitation associated with mitral valve disease: repair and replacement (Kay, Morita, & others) 1989;48:S93-5\*

Tricuspid valve *Candida* endocarditis cured by valve-sparing debridement (Tanaka, Abe, & others) 1989;48:857-8,CR

**Truncus arteriosus**

Internal banding for truncus arteriosus (Parnell) 1989;48:610,CP; Reply (Young) 1989;48:610,CP

Successful diagnosis and surgical treatment of single ventricle, truncus arteriosus (Shaddy & McGough) 1989;48:298-300,CR

Truncus arteriosus with interrupted aortic arch: successful correction in a neonate (McKay, Miyamoto, & others) 1989;48:587-9,CR

**Tuberculosis**

The olden days of surgery for tuberculosis (Newman) 1989;48:161-2,ED

Surgical resection for complications of pulmonary tuberculosis (Reed, Parker, & Crawford) 1989;48:165-7\*

**Ultrasonography**

Intraoperative ultrasonic imaging of the ascending aorta (Marshall, Barzilai, & others) 1989;48:339-44\*

Ultrasonic debridement of calcified pericardium in constrictive pericarditis (Johnson, Thurer, & others) 1989;48:855-6,CR

**Valves**

Aortic valve and left ventricular outflow tract replacement using allograft and autograft valves: A preliminary report (Randolph, Toal, & others) 1989;48:345-9\*

The ball valve experience over three decades (Swanson & Starr) 1989;48:S51-2\*

**Valves (cont'd)**

Buckling in bioprosthetic valves (Fisher & Davies) 1989; 48:147-8,CP; Reply (Vesely & Boughner) 1989;48:148,CP

Cardiac valve replacement in the elderly: clinical performance of biological prostheses (Jamieson, Burr, & others) 1989; 48:173-85\*

Coronary arterial and sinus anatomy in hearts with common arterial trunk (Suzuki, Ho, & others) 1989;48:792-7\*

Coronary flow velocity waveforms in aortic stenosis and the effects of valve replacement (Fujiwara, Nogami, & others) 1989;48:518-22\*

De Vega's annuloplasty for acquired tricuspid disease: early and late results in 110 patients (Abe, Tukamoto, & others) 1989;48:670-6\*

The expected lifetime of porcine valves (Starr & Grunkemeier) 1989;48:317-8, ED

Freehand homograft aortic valve replacement—the learning curve: a technical analysis of the first 31 patients (Jones) 1989;48:26-32\*

Hematological complications with the St. Jude valve and reduced-dose Coumadin (DiSesa, Collins, & Cohn) 1989;48: 280-3\*

Long-term survival after triple-valve replacement (Mulder, Kattus, & Drinkwater) 1989;48:289-91,CR

The porcine bioprosthetic heart valve: experience at 15 years (Magilligan, Lewis, & others) 1989;48:324-30\*

Reduction of ball variance in silicone rubber occluders (Kahn & Carmen) 1989;48:S10-11\*

Replacement of the esophagus by a segment of colon provided with an antireflex valve (Larsson, Lycke, & Radberg) 1989;48:677-82\*

Thrombotic obstruction of disc valves: clinical recognition and surgical management (Kontos, Schaff, & others) 1989; 48:60-5\*

Valve replacement in the octogenarian (Fiore, Naunheim, & others) 1989;48:104-8\*

Valve replacement in the right side of the heart in children: long-term follow-up (Fleming, Sarafian, & others) 1989; 48:404-8\*

*See also* Heart valve replacement, World Congress proceedings; specific valves.

**Valvuloplasty**

Surgical implications of atrial septal defect complicating aortic balloon valvuloplasty (Lemmer, Winniford, & Ferguson) 1989;48:295-7,CR

**Vena cava, inferior**

Resection of atriocaval adrenal carcinoma using hypothermic circulatory arrest (Shahian, Nieh, & Libertino) 1989;48: 421-2,CR

Transatrial membranotomy for Budd-Chiari syndrome (Chang, Lee, & others) 1989;48:409-12\*

**Vena cava, superior**

Longevity of expanded polytetrafluoroethylene grafts for superior vena cava (Masuda, Ogata, & others) 1989;48: 376-80\*

Pseudoaneurysm formation with superior vena caval syndrome 7 years after aortic composite graft placement (McFalls, Palac, & others) 1989;48:704-5,CR

Pseudoaneurysm formation with superior vena caval syndrome (Palac, & others) 1989;48:704-5,CR

**Ventilation, high-frequency**

Right ventricular function and high-frequency positive-pressure ventilation during coronary artery bypass grafting (Nakatsuka, Colquhoun, & Gehr) 1989;48:263-6\*

**Ventricle, left**

Aortic valve and left ventricular outflow tract replacement using allograft and autograft valves: a preliminary report (Randolph, Toal, & others) 1989;48:345-9\*

Asanguineous reperfusion in a canine model of cardiopulmonary bypass and controlled postischemic work (Rebeyka, Wilson, & others) 1989;48:397-403\*

Effect of left ventricular septal myectomy on concurrent mitral regurgitation (Cooper, Tucker, & others) 1989;48:251-6\*

Factors influencing long-term (10-year to 15-year) survival after a successful coronary artery bypass operation (Johnson, Brenowitz, & Kayser) 1989;48:19-25\*

Large animal model of left ventricular aneurysm (Markovitz, Savage, & others) 1989;48:838-45\*

Late failure of double-inlet left ventricle septation: treatment by orthotopic heart transplantation (Stellin, Mazzucco, & others) 1989;48:577-8,CR

Left ventricular rupture (Aris) 1989;48:455,CP; Reply (Berger, Karlson, & Ashraf) 1989;48:455-6,CP

Pulmonary artery versus left ventricular venting: a radioisotope study of left ventricular function (Mitchell, Prabhakar, & others) 1989;48:699-703\*

**Ventricle, right**

Construction of an aortic homograft conduit for right ventricle to pulmonary artery continuity (Hoots & Watson) 1989; 48:731-2,HW

Effects of atrial cardioplegia on the ischemic right ventricle after acute coronary artery occlusion and reperfusion (Diehl, Kaplan, & others) 1989;48:829-34\*

Impairment in right ventricular performance after left ventricular aneurysm operation (Durand, Bastien, & others) 1989;48:888-9,CP; Reply (Mangschau, Geiran, & others) 1989;48:889,CP

Right ventricular function and high-frequency positive-pressure ventilation during coronary artery bypass grafting (Nakatsuka, Colquhoun, & Gehr) 1989;48:263-6\*

Right ventricular pressure dynamics after operation for pulmonary stenosis (Milo, Mohr, & Goor) 1989;48:572-4\*

**Ventricles**

Autopsy findings 14 years after septation for single ventricle (Shirakura, Kawashima, & others) 1989;48:124-5,CR

Can ventricular decompression be optimized? (Lee) 1989;48: 454,CP; Reply (Pennington) 1989;48:454,CP

Comparison of ventricular septal surgery and mitral valve replacement for hypertrophic obstructive cardiomyopathy (Walker, Reid, & others) 1989;48:528-35\*

Successful diagnosis and surgical treatment of single ventricle, truncus arteriosus (Shaddy & McGough) 1989;48:298-300,CR

Use of autologous pericardium for ventricular aneurysm closure (Vincent) 1989;48:146,CP

**Ventricular assist devices**

The Pierce-Donachy ventricular assist device as a bridge to cardiac transplantation (Gray, Ganzel, & others) 1989;48: 222-7\*

**Ventricular fibrillation**

Coronary artery bypass grafting in patients with ventricular fibrillation (Kron, Lerman, & others) 1989;48:85-9\*

**Ventricular septal defect**

Autopsy findings 14 years after septation for single ventricle (Shirakura, Kawashima, & others) 1989;48:124-5,CR

Clinical features of aortic arch anomaly with malalignment ventricular septal defect (Iwahara, Ino, & others) 1989; 48:693-6\*

**Pulmonary artery banding: analysis of a 25-year experience**  
(Horowitz, Culpepper, & others) 1989;48:444-50,CT

**Wada-Cutter heart valve**

Wada-Cutter heart valve: overall experience at the Sapporo Medical College (Wada, Komatsu, & Kazui) 1989;48:S38-40\*

**Water-seal drainage**

Gotthard Bülau and closed water-seal drainage for empyema, 1875-1891 (Meyer) 1989;48:597-9,CL

**Xenon 133 studies**

Determinants of perioperative morbidity and mortality after pneumonectomy (Wahi, McMurtrey, & others) 1989;48: 33-7\*

